

THE
BIBLIOTHECA SACRA

ARTICLE I.

THE PLAGUES OF EGYPT.

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THE general influence of the current teaching of science seems unfavorable to the growth and maintenance of a sturdy faith in the good providence of God. That He not only governs the nations of the earth and leads them to their appointed destiny, but that his care extends to the smallest matter of the individual human life, in the words of Jesus, the very hairs of the head being numbered; that it includes within its ministrations all forms of animal life, the raven being fed by Him, and the sparrow not falling to the ground without his knowledge; in fine, that "He is ever present with His works one by one, and confronts everything He has made by His particular and most loving providence, and manifests Himself to each according to its needs," are comfortable statements not easily believed by this generation. Science disclaims all knowledge of a God to whom such epithets as holy, wise, loving, can be applied; nor does it acknowledge that He controls all natural laws for his own gracious purposes. There is a First Cause, but it is inscrutable. Man can trace the laws of nature, but of their real essence he knows nothing; all he can be sure of is that throughout the wide domains of time,

Vol. LXV. No. 259. 1

space, matter, and life these laws reign supreme, being universal, uniform, inexorable. So it has come to pass that even religious teachers regard as incredible those exceptional episodes in the lives of individuals, or in the history of nations, recorded in the Scriptures, which were held to be special or marvelous manifestations of God's power for the good of the world. In the judgment of the most outspoken, the miraculous narratives of the Bible, when not regarded as poesies, are stultifying to science and common sense, antagonistic to the higher activities of true faith, and an intelligent man who affirms his belief in them does not know what intellectual honesty means.

Such uncompromising, unequivocal statements are rather disconcerting to the ordinary believer, who is unable to rise quickly to new altitudes of faith, or without strength to accompany these religious guides along a path described by themselves as a *via dolorosa*. This is not to be wondered at, for consider some of the issues involved. By faith Moses, at the time of the exodus, instituted the Passover and the sprinkling of blood, that the destroyer of the first-born of the Egyptians should not touch the Hebrews. For thousands of years the Jews have celebrated annually this deliverance, strengthening faith in their own spiritual vocation, and finding comfort in their troubles and adversities, by recalling what God did for their ancestors. "O God, we have heard with our ears, and our fathers have declared unto us, the noble works that thou didst in their days and in the old time before them: O Lord, arise, help us, and deliver us for thine honor." This in effect has been their constant prayer. This ancient deliverance is now said to be a pious myth. God did not set his signs in Egypt, nor his wonders in the field of Zoan. "In truth, though the story of the plagues is not without interest, it is

nothing but a theologoumenon.”¹ This is a hard saying, who can bear it?

When the Apostle Paul in a famous argument contends for the absolute sovereignty of God over human life and history, having mercy on whom He will and hardening whom He will, the Pharaoh of the exodus is cited as an instance of one whose heart was indurated by the judgments of God. Now if the plagues are nothing but the invention of a pious imagination, or myths slowly developed, the citation, to say the least, is very unfortunate. But the sturdy Calvinist need not be discouraged. According to the writer just quoted, “God is not banished from the history of Israel, even if the Exodus was attended by no physical signs and wonders, no slaughter of the Egyptian first-born, no drowning of a hostile king in the Red Sea.” The difficulty is that when an alleged historical event, as the migration of the Hebrews, is shorn of all its accompaniments, and it stands isolated, unrelated to anything before or after, it also is soon declared incredible.

Leaving the defense of the supernatural to abler writers, it is the modest purpose of this article to attempt to show that the narrative of the plagues, even when divested of all that can be called miraculous, is worthy of credence as the record of a series of remarkable national calamities culminating in a terrible outbreak of pestilence, an outbreak which perhaps Moses foresaw when he said to Pharaoh before the plagues began: “The God of the Hebrews hath met with us: let us go, we pray thee, three days’ journey into the wilderness, and sacrifice unto the Lord our God; lest he fall upon us with pestilence, or with the sword” (Ex. v. 3).

In support of the credibility of the narrative from this point

¹ Cheyne, *Encyclopædia Biblica*, article “Plague.”

of view, a few preliminary observations may not be out of place. If an exodus of the Hebrews from Egypt actually occurred at the beginning of their national history,—and all writers seem to concede this,—surely it was preceded by events which stirred profoundly the minds of the Egyptians and induced them to make the very heavy sacrifice involved in the liberation. Slaves have seldom or never won emancipation easily: a price has always been paid of some kind. It were an anachronism to suppose the migration was permitted from philanthropic motives. No other explanation is so easy to believe as the one given in Scripture, that the Hebrews were hurried out of the country because the Egyptians were panic-stricken by disasters for which they held their slaves accountable.

In the next place, a succession of disasters culminating in pestilence is not incredible. Other nations have had the same sad experience. In A.D. 1333 there was an epidemic of bubonic plague in China: in the central provinces it was preceded by parching drought and famine, then by violent torrents of rain and earthquakes; in the southern provinces by drought, famine, a plague of locusts, and much sickness.¹ Irak and Syria near the close of the same century were depopulated by a series of destructive earthquakes, followed by famine, epidemics, epizootics, and plague.² Epidemics of plague in the valley of the Euphrates in 1867, and again in 1873, were preceded by great inundations. Its outbreak in the province of Bengazi, North Africa, followed on four years' drought, when the greater part of the flocks and herds had perished from want of food and from disease, plague breaking out among the people when

¹ Hecker, *Epidemics of the Middle Ages*.

² Simpson, *Treatise on Plague*, p. 20.

they were suffering most from famine, and when their physical and social misery was greatest. Previous to a plague epidemic in Hongkong in 1894, several extraordinary phenomena were noticed, among them visitations of caterpillars, which attacked the trees and grain in such multitudes that the government had to take measures to destroy the pests. Abnormal seasons preceded the plague in Bombay in 1896,¹ and in Cape Town in 1901, where a rare comet was visible for several nights.²

Further, as great physical disasters have often led to social and political changes,³ or have been synchronous with them, the mere fact that striking episodes in the history of other nations became invested in the course of time with a mythical halo, furnishes no strong argument, in and by itself, for doubting the events of the exodus. History proves that when nation has risen against nation, and kingdom against kingdom, not infrequently there have been great earthquakes, famines, pestilences, and other calamities. When the Roman Empire was tottering to its fall, the general disorder was aggravated by an unusual train of calamities. Besides the ruin of society attendant on the invasion of the empire by barbarians, there came a succession of droughts, pestilences, and earthquakes, which seemed to keep pace with the throes of the moral world. It was under the pressure of these calamities that the Litany of the Episcopal Church, with its pleadings for deliverance from "lightning and tempest," "plague, pestilence, and fam-

¹ Report, Health Officer of Bombay, 1896.

² Simpson, *op. cit.*, p. 142.

³ The severe visitation of plague in England in the reign of Edward III. changed the system of land tenure, and led indirectly to the Protestant Reformation, as unworthy men then crept into the church as priests to fill the numerous vacancies caused by the plague, and their evil influence lived after them.

ine," from "battle, murder, and sudden death," etc., was compiled, and became a part of the ordinary church service.¹

Turning to modern history, in the year preceding the great French Revolution a severe drought was followed on the eve of the harvest by a hailstorm of extraordinary violence and extent, which destroyed the crops for sixty leagues round Paris. This was followed by the severest winter known for eighty years. In the spring and summer of 1789, food was at famine prices; throughout the land there was great distress. In July of the same year, the revolution began in earnest, the people being driven to it more by hunger and misery than by the desire for political freedom. Again, the course of European history might have been very different had not the armies of Napoleon been overwhelmed by the snows of Russia, and had not the ships of the Spanish Armada which invaded England been scattered or destroyed by furious storms. "Not unto us, O Lord, not unto us, but unto thy name, be the glory," was the cry of the grateful nation at its wonderful and providential deliverance. Yet if we had to rely on oral tradition only for our knowledge of these events, many in our day would regard them as inventions.

It must also be added that in ancient times physical calamities affected a nation's course far more than they do now, because all such visitations as plague, pestilence, and famine were invested with supernatural significance, being regarded as indications of the displeasure of the heavenly powers. Indeed, almost everything in the heavens above or in the earth beneath which arrested men's attention, eclipses, comets, streams of meteorites, thunder and lightning, storms, inundations, volcanic eruptions, monstrous human and animal

¹ Stanley, *Christian Institutions*, chap. xli.

births,—all were of punitive or ominous significance.¹ To placate the displeasure of the gods, to avert the evils which it was believed would follow if it were not placated, a very heavy price was often paid. That a nation at the time of the exodus, terror-stricken by numerous disasters, should lift the yoke of bondage from a people whose God they were persuaded had sent the disasters, whom therefore they desired to appease, is not an event to stagger belief. Where the restraints of religion and law are weak, the first movement of people smarting under great misfortune may be to massacre, if they have the power, those who are the cause of it, especially if the latter belong to a poor, despised race against whom ill-feeling has long been smoldering; “pogroms” still take place in Russia, and in other Christian lands the Jews at various times have been slaughtered for offenses, real or imaginary, against the state. But the Egyptians were restrained by their religious fears from such cruel reprisals. According to their own account, they felt an aversion, a dread of the Hebrews. Pharaoh had troubled dreams concerning them, and the oracles he consulted advised him to send the Hebrews away.² This agrees with the words of the Psalmist, “Egypt was glad

¹ “Cæsar, I never stood on ceremonies,
Yet now they fright me. There is one within,
Besides the things which we have heard and seen,
Recounts most horrid sights seen by the watch;
A lioness hath whelped in the streets;
And graves have yawned and yielded up their dead;
Fierce, fiery warriors fought upon the clouds,
In ranks and squadrons and right form of war,
Which drizzled blood upon the capitol;
The noise of battle hurtled in the air,
Horses did neigh, and dying men did groan,
And ghosts did shriek and squeal about the streets.”

Julius Cæsar.

² Josephus, *Against Apion*, i. 26–34.

when they departed; for the fear of them had fallen upon them.”

On broad, general grounds, therefore, there is no strong argument, *a priori*, against the occurrence of the events recorded in the Scriptures. The narrative is consistent in all its parts, and furnishes good and sufficient reasons for the exodus. Passing now to the consideration of the plagues separately, the difficulties which may be encountered are not insurmountable, if the historical imagination be given a little freedom.

THE FIRST PLAGUE.

The waters of the Nile were turned into blood; the fish in the river died; the river stank, so that the Egyptians could not drink of its waters.—In all ages the two scourges most dreaded by the Egyptians have been aridity and pestilence. The first plague seems to have been aridity, as the last was pestilence. The prosperity of Egypt, indeed its very life, depends on the Nile with its annual overflow.

“In the winter and spring it rolls a languid stream through a dry and dusty plain. But in the summer an extraordinary thing happens. The river grows troubled and swift; it turns red as blood and then green; it rises, it swells, till at length overflowing its banks, it covers the adjoining lands to the base of the hills on either side. The whole valley becomes a lake from which the villages rise like islands for they are built on artificial mounds.”

The daily rise of the river was measured carefully by officials, who were able from long experience to predict what the crops and budget of the year would be. A high Nile meant abundance of food and general prosperity. A low Nile meant the reverse, for large tracts of land were then left unwatered and unproductive, with consequent dearth or famine and perhaps pestilence, as this in Oriental countries often accompanies or follows famine. The failure of the waters to rise is generally caused by an immense accumulation of vegetable

matter obstructing the channels of the river in its upper courses.¹

The extraordinary death of fish points to a low Nile as having been the first plague, for the waters of a high Nile, though discolored, are not injurious to animal life, but are then most potable. To judge from an ancient hymn addressed to the god of the river, this death of fish when the waters were low cannot have been an extremely rare event:—

“To his house he doth return,
Like a priest for oracles,
Shrinking to his urn;
Cometh forth just when he wills,
From his mystic fane;
By his wrath the fish are slain;
Then the hungry come before thee,
For the waters they implore thee,” etc.

Of similar import are several passages of the Hebrew scriptures:—

“Behold, at my rebuke I dry up the sea, I make the rivers a wilderness; their fish stinketh, because there is no water, and dieth for thirst” (Isa. l. 2).

“And I will give over the Egyptians into the hand of a cruel lord; . . . And the waters shall fail from the sea, and the river shall be wasted and become dry. And the rivers shall stink; the canals of Egypt shall be minished and dried up; the reeds and flags shall wither away. The meadows by the Nile, by the brink of the Nile, and all that is sown by the Nile, shall become dry, be driven away, and be no more” (Isa. xix. 4, 5).

From these passages it is evident the fish died because of the scarcity of water, its turbidity, and offensiveness.

The plague caused great public distress and anxiety. The agriculturists were dismayed by the prospect of a very poor harvest. The fishermen also lamented, and all they that were accustomed to cast angle into the Nile mourned, and they that spread nets upon the river languished (Isa. xix. 8). The distress soon extended to all classes of the community, for the

¹ Wright, *Scientific Confirmations of Old Testament History*, p. 74.

drinking of impure water, the insufficiency of water for household and sanitary purposes, and the odors of decaying fish must have caused much discomfort and sickness.¹ The plague was therefore "the beginning of sorrows and great mournings; the beginning of famine and great death."

How long the waters were retarded we know not, for the words, "and when seven days were fulfilled after that the Lord had smitten the river," do not necessarily indicate the duration of the plague. It lasted until the waters returned to their proper channels by the breaking up or diversion of the "sudd," as the accumulation of vegetable matter is called.²

As to the waters being turned into blood, perhaps the statement ought not to be taken too literally. The term "blood" is often used in a figurative sense in the Bible,³ as indeed in all

¹ Humboldt relates that, in an eruption of Cotopaxi, so many fish of the order *Pimelodus* were ejected that they poisoned the air all round; and it is recorded by Pouchet that near the end of the eighteenth century the town of Bourra was ravaged by a malignant fever, which was attributed to the miasmata arising from the decomposition of an enormous number of these fish vomited by a neighboring volcano (Simpson, *Treatise on Plague*, p. 139).

² In A. D. 1106 there was a period of low water which caused great alarm in Egypt. Whereupon "the Sultan of Egypt sent an envoy with magnificent presents to the Emperor of Ethiopia, begging him to remove the cause of the Nile's failure in that year, and so save Egypt from the horrors of famine. The Ethiopian monarch was ultimately persuaded to suffer a dam to be opened that had turned the river, which taking its usual course, rose three cubits in one day. . . . The envoy on his return received great honors from the relieved Egyptians." (Quoted from the Arabic historian Elmacin by Ward, *Pyramids and Progress*, p. 265; Wright, *op. cit.*, p. 74.)

³ "For the waters of Dimon are full of blood" (Isa. xv. 9). The threat to Pharaoh, king of Egypt: "I will also water with thy blood the land wherein thou swimmest, even to the mountains; and the water-courses shall be full of thee" (Ezek. xxxii. 6). The two witnesses of the Apocalypse "have power over the waters to turn them into blood," and when the second angel sounded the trumpet, "the third part of the sea became blood, and there died the third part of the creatures which were in the sea" (Rev. xl. 6; viii. 8).

literature.¹ In this connection it may simply mean that the water, especially in the irrigation canals, was thick, stagnant, and offensive, as would be the case when the river was very low, and to this extent it resembled decomposing blood. If we are to understand that the water exactly resembled blood in all its qualities; if, in the words of a devout exegete, "from bank to brae the tide of crimson gore swept on, hour after hour, and day after day," then the phenomenon observed by travelers, of the Nile and the Red Sea being turned red by "the presence and inconceivably rapid growth of microscopic animals (*Infusoria*) and minute cryptogamous plants of a red color," is suggestive of a possible explanation.

It is doubtful if the first, or any of the plagues, struck such a blow at idolatry as to weaken its hold upon the Egyptians of that period; but it is quite probable that all of them tended to undermine the popularity and power of Pharaoh. He was to the people their visible divinity, and upon his favor with the gods it was believed the prosperity and happiness of the country depended. So run the inscriptions to the Pharaohs:—

"Thus speaks Ptah-Totunen with the high plumes, armed with horns, the father of the gods, to his son who loves him: Thou vivifiest the inhabitants of the earth through thy commands, King Rameses. I have made thee an eternal king, a prince who lasts forever. I have bestowed on thee the dignity of the divine crown; thou governest the two countries as a legitimate sovereign; I have given thee a high Nile, and it fills Egypt for thee with the abundance of riches and wealth; there is plenty in all places where thou walkest; I have given thee wheat in profusion to enrich the two countries in all times; their corn is like the sand of the shore, the granaries reach the sky, and the heaps are like mountains. Thou rejoicest and thou art praised when thou seest the plentiful fishing, and the mass of fishes which is before thy feet. All Egypt is thankful toward thee."

¹"Will all great Neptune's ocean wash this blood
Clean from my hand? No, this my hand will rather
The multitudinous seas incarnadine,
Making the green one red."—*Macbeth*.

With a low Nile, the mass of fishes dead, and the prospect of famine, it was hardly possible for the people to rejoice and praise their king.

THE SECOND PLAGUE.

The land infested with frogs.—The monuments of Egypt abound in representations of frogs, toads, tortoises, and serpents, “creeping things” classed together in ancient times. The frog was taken by the Egyptians as an emblem of fertility, and its ideogram in their system of hieroglyphics signified a myriad. So the second plague was not a phenomenon new and astounding to the people whom it afflicted. It was simply one of the natural troubles of the country greatly magnified. Then, as now, “in the height of the inundation, the abounding moisture quickens inconceivable myriads of frogs and toads which swarm everywhere.”

As throwing light on this plague, allusion is sometimes made to travelers' tales of showers of frogs having been seen in different parts of the world. The foundation of such reports is that after a period of drought showers of rain revivify and bring forth suddenly to common observation innumerable frogs which had lain concealed and torpid in the earth or under stones or other objects during the dryness. An inundation has the same effect, and it also produces the conditions most favorable to the development of batrachian spawn. Hence the old Egyptian belief, often mentioned by Greek writers, that frogs were born of the mud which the Nile fertilized at the annual inundation. The rising of the Nile and its overflow, after the drought of the first plague, led naturally to the second plague of swarms of frogs.

The references to frogs in Egyptian literature are very scanty. One or two of the Egyptian deities of inferior rank were frog-headed. It is probable that religious customs and

superstitions made the plague very hard to bear, especially if the Egyptians regarded, as we know the Hebrews did,¹ the dead bodies of batrachians and reptiles with the utmost abhorrence, the slightest contact, immediate or mediate, being held to carry defilement.

According to the Scripture narrative, when the frogs died, the people "gathered them together in heaps: and the land stank." The defilement of the soil, and the poisonous effluvia from so many dead bodies, doubtless caused much sickness, and the way was certainly prepared for an epidemic. The plague must also have been a trial to those of weak, unstable, nervous organization, many women and girls becoming hysterical, for the frogs were continually being found in the most unlikely places: "frogs in the houses, frogs in the beds, frogs baked with the food in the ovens, frogs in the kneading-

¹"... the great lizard after its kind, and the gecko, and the land-crocodile, and the lizard, and the sand-lizard, and the chameleon. These are they which are unclean to you among all that creep: whosoever doth touch them, when they are dead, shall be unclean until the even. And upon whatsoever any of them, when they are dead, doth fall, it shall be unclean: whether it be any vessel of wood, or raiment, or skin, or sack, whatsoever vessel it be, wherewith any work is done, it must be put into water, and it shall be unclean until the even; then it shall be clean. And every earthen vessel, whereinto any of them falleth, whatsoever is in it shall be unclean, and it ye shall break. All food therein which may be eaten, that on which water cometh, shall be unclean. . . . And everything whereupon any part of their carcass falleth, shall be unclean: whether oven, or range for pots, it shall be broken in pieces: they are unclean, and shall be unclean unto you" (*Lev. xi. 29-35*).

The words in these verses denoting animals are of uncertain meaning. *Tzûb*, variously translated as "tortoise," "land-crocodile," "great lizard," etc., may be the tadpole; and *koach*, translated "chameleon," "monitor lizard," "land-crocodile," etc., may be the frog; cf. Arabic *keek*, Greek *κοῦξ*, Latin *coacare* (*Speaker's Commentary*). Considering that, to the Jew, frogs were emblematic of the spirits of uncleanness (*Rev. xvi. 13*), it is more than likely they were included in the list of unclean animals.

troughs worked up with the flour; frogs with their monotonous croak, frogs with their cold slimy skins, everywhere,—from morning to night, from night to morning,—frogs.”

Of this plague and the one preceding it is said, “And the magicians of Egypt did in like manner with their enchantments.” The explanation usually offered by commentators is that the magicians, by sleight of hand or other conjuring trick, imitated the deeds of Moses. It is hard to see how the waters of the Nile could have been altered, or multitudes of frogs produced, by sleight of hand. Others suppose that the magicians were in alliance with evil spirits under the name of heathen gods, and by their aid did marvelous things. This also is unsatisfactory, for with the growth and dissemination of science there is an increasing disinclination to think the devil and other evil beings ever had the influence over the forces of nature which our forefathers believed they possessed.¹

The true explanation of the sorcery of the Egyptian priests is to be sought in the beliefs and practices of religions in their more primitive stages. When knowledge of physical law is rudimentary, and the idea of its steadfast order has not been conceived, men think there is hardly any limit to the power

¹The great Christian traveler Marco Polo gravely relates that among the Thibetans “are necromancers who by their infernal art perform the most extraordinary and delusive enchantments that were ever seen or heard of. They cause tempests to arise, accompanied with flashes of lightning and thunderbolts, and produce many other miraculous effects.” At the court of Kublai Khan, “the astrologers or magicians sometimes display their skill in a wonderful manner; for if it should happen that the sky becomes cloudy and threatens rain, they ascend the roof of the palace where the grand khan resides at the time, and by the force of their incantations they prevent the rain from falling and stay the tempest; so that whilst, in the surrounding country, storms of rain, wind, and thunder are experienced, the palace itself remains unaffected by these elements.” In British India at the present time there are many natives who credit the yogis with similar powers.

which they can acquire over nature, especially if, by prayers or threats, they can obtain the aid of the supernatural beings who control its forces.¹

¹To be quite frank, this is rather a difficult subject, for it has always been held in the Christian church, that prayers addressed to God may be effective in changing the weather. In the Prayer-book of the Episcopal Church, for example, are set prayers for fair weather, for rain, and for fruitful seasons. And there is warrant for this in Scripture. "Elijah was a man of like passions with us, and he prayed fervently that it might not rain; and it rained not on the earth for three years and six months; and he prayed again; and the heaven gave rain, and the earth brought forth her fruit" (James v. 17, 18). Among the heathen a similar belief in the efficacy of prayer for the same purposes may be held quite sincerely, and, starting from very similar premises, it is not easy to show by argument wherein they are wrong. Livingstone had an interesting conversation on this subject with a rain-maker of one of the South African tribes. Said the missionary, "So you really believe that you can command the clouds? I think that can be done by God alone." The rain-maker replied, "We both believe the very same thing. It is God that makes the rain, but I pray to him by means of these medicines, and, the rain coming, of course it is mine. It is I who made it for the Bakwena during many years, when they were at Shokwane; through my wisdom, too, their women became fat and shining. Ask them; they will tell you the same." "But we are distinctly told, in the parting words of our Saviour," said Livingstone, that we can pray to God acceptably in His name alone, and not by means of medicines." "Truly," replied the rain-maker, "but God told us differently. He made black men first, and did not love us as He did the white men. He made you beautiful, and gave you clothing, and guns, and gunpowder, and horses, and wagons, and many other things about which we know nothing. But toward us He had no heart. He gave us nothing except the assegai, and cattle, and rain-making; and He did not give us hearts like yours. We never love each other. Other tribes place medicines about our country to prevent the rain, so that we may be dispersed by hunger, and go to them and augment their power. We must dissolve their charms by our medicines. God has given us the knowledge of certain medicines by which we can make rain. We don't despise those things which you possess, though we are ignorant of them; we don't understand your book, yet we don't despise it. You ought not to despise our little knowledge though you are ignorant of it." This incident may serve to illustrate the controversial difficulties which Moses had with Jannes, Jambres, and other magicians.

In the religious life of the ancient Egyptians, magic held a large and important part. It was invoked against all the dangers and disasters of the present as well as the future life. It was based on the notion of frightening one god by the terrors of a more powerful divinity, either by prayer placing the person requiring help under the protection of this divinity, or by the person actually assuming its name and authority.¹ The magicians of Pharaoh doubtless spoke in the name and assumed the authority of the gods they considered to be the most serviceable in the circumstances. What was most desired by king and people, one would think, was the removal of the plagues, but the magicians did not attempt this; they were shrewd men and close observers of nature, and, called in when the plagues were only beginning, their incantations—and experience—enabled them to predict the continuance and increase of the plagues, which happened in due course. Thus for a time they were able to contend with Moses.

¹The alleged power of sorcery was tremendous. In the Egyptian Story of Setna, two formulas are mentioned. "If a man will recite the first, he will enchant the heaven, the earth, the Underworld, the mountains and the waters; he will know the birds of the sky and all reptiles; he will see the fishes of the deep, for a divine power will cause them to come to the surface of the water. And if a man recite the second formula, then, although he lay in the grave, he shall take again the form which he had on earth; he shall see the Sun god rising in the sky, and his divine cycle; he shall see the Moon god in his true form which he takes at his appearing." In one conjuration for a woman in labor, the gods are summoned to her help. Should they refuse to come, "then shall ye be destroyed, ye nine gods; the heaven shall no longer exist, the five days over and above the year shall cease to be, offerings shall no more be made to the gods the lords of Heliopolis. The firmament of the South shall fall, and disaster shall break forth from the sky of the North. Lamentations shall resound from the graves, the midday sun shall no longer shine, the Nile shall not bestow its waters of inundation at the appointed time." Absurd as the pretensions of sorcery may seem to us, the multitudes thoroughly believed in them long ago, and great was their fear of sorcery and of the sorcerers.

THE THIRD AND FOURTH PLAGUES.

The dust of the earth becomes lice. The air swarms with insects.—As Egypt abounds with many forms of insect life, and the terms used in the Scriptures have not yet been properly defined, it is not easy to determine precisely the species of insects which tormented the Egyptians in these plagues.

The "lice" were probably the dust ticks which are so common in Egypt. This little creature fastens itself on its victim, sucks the blood, and in a few hours distends from the size of a grain of sand to that of a pea. A traveler writes: "I have frequently seen dry desert places so infested with ticks, that the ground was perfectly alive with them, and it would have been impossible to have rested on the earth; in such spots the passage in Exodus has frequently occurred to me as bearing reference to these vermin which are the greatest enemies to man and beast."¹

The plague of flies may have been unusual swarms of the common house-fly.² The same traveler relates: "The plagues of Egypt were upon us; the common house-flies were in billions, in addition to the cattle tormentor." The latter is a peculiar fly which, he says, invades the country shortly after the commencement of the rains, and tortures all the domestic animals.³ Extraordinary swarms of mosquitos probably increased the general discomfort.

In addition to the bodily torment caused by these various insect pests,—and one must have lived in hot climates to know how severe this can be,—the third and fourth plagues were of evil omen, raising in the minds of the Egyptians the fear of

¹ Sir Samuel Baker, *The Nile Tributaries*, p. 84.

² *Ibid.*

³ This was probably "the fly from the uttermost part of the rivers of Egypt" (Isa. vii. 18). In Ethiopia, where the rivers of Egypt are
Vol. LXV. No. 259. 2

pestilence. Only recently have we come to understand the very important part taken by insects in the propagation of infective diseases, and therefore know that such fears were not without foundation. The germs of malaria, a disease common in all parts of the world, and so common in ancient times as to contribute to the downfall of empires, are conveyed from one person to another by the bites of mosquitos. Prior to the sanitary improvements introduced by the British administration, malaria caused a heavy annual mortality in Egypt. The common house-fly spreads such diseases as leprosy, typhoid fever, and occasionally bubonic plague, by becoming laden with pathogenic germs from contact with the sick or with their discharges, and then alighting on articles of food and drink, or upon open sores or wounds. The fleas which infest rats are the principal agents in spreading the plague. Many other diseases of men and animals are transmitted by means of insects.

The old historians were not far wrong, therefore, in holding there was some relationship between extraordinary visitations of insects and subsequent outbursts of epidemic disease. Preceding the Black Death of the fourteenth century, they state the insect tribes were wonderfully called into life.¹ In recent the tributaries of the Nile, the Blue Nile and the Atbara, at the rising of the dog star there comes a terrible fly which drives even the wild beasts from the river banks, and destroys all flocks and herds.

Another instance of certain seasonal conditions bringing into activity swarms of insects is to be seen in the annual but sudden appearance of green flies in Calcutta near the end of the rains. So great is their number that for several nights it is impossible to read with comfort except under a mosquito curtain. They get into the food and drink, swarm around the lamps, and it is impossible to be comfortable for the few nights of their ephemeral existence. The flies disappear almost as suddenly as they come.

¹ Hecker, Epidemics of the Middle Ages.

times, Sablonowski, the scientist who in a measure anticipated the discovery of the plague bacillus, has stated that during the Mesopotamian epidemic of plague in 1884, a species of fly appeared and disappeared concurrently with the plague, and he considers it helped to spread the contagion.¹ In 1902 plague appeared in Australia; fleas were very numerous on the rats during the epidemic, but disappeared when it was over.² It is desired to lay emphasis on this manner of conveying disease, as it will be urged presently that the sixth and tenth plagues were epidemics of bubonic plague.

THE FIFTH PLAGUE.

The cattle in the field, the horses, asses, and the camels are smitten with a fatal murrain.—“Murrain” is a term loosely used to designate several very infectious diseases of the lower animals. As epizootics have been common in all parts of the world from the earliest times, there is no particular reason for doubting the occurrence of this plague. The only difficulty is to determine its exact nature. The most common murrains are anthrax, foot and mouth disease, glanders, and rinderpest or cattle plague. Besides these, countries have their own peculiar murrains. Thus in India, at the present time, there is a disease, called “surra,” which every year destroys thousands of the agricultural animals, and causes immense tracts of land to lie uncultivated; in certain districts it has destroyed every horse, sheep, and camel. The description of animal diseases in ancient records is very meager. A writer of the time of Nero, named Columella, records a plague among the cattle of Syria and surrounding districts which seems, from his description, to have been rinderpest. Perhaps the fifth plague

¹ Manson, *Tropical Diseases* (First ed.), p. 153.

² Tidswell, Board of Health Report, Sydney, 1902.

was rinderpest, as this disease has not infrequently visited Egypt, where the natives have always regarded it as the precursor of bubonic plague.

This plague fell heavily on the Egyptians. The destruction of cattle brought ruin to thousands, besides causing general distress from the great scarcity of animal food. Many in their hunger devoured meat which was tainted and fell victims to disease. The offensive emanations from the bodies of dead cattle left exposed, also caused much sickness. All the conditions were such as to promote the development of a widespread epidemic. When plague appeared in Maku, Persian Kurdistan, in 1863, it was noted that the infected district was pervaded with the putrid emanations from the unburied bodies of cattle which had died from murrain.

THE SIXTH PLAGUE.

Men and beast are smitten with boils and blains; boils appeared upon all the Egyptians.—If the boils and blains had affected human beings only, there would be no difficulty in finding among the diseases of Egypt one that might have been the plague. A modern traveler writes:—

“The plague of boils broke out and every one was attacked more or less severely. Then came a plague of which Moses must have been ignorant, or he would surely have inflicted it upon Pharaoh. This was a species of itch, which affects all ages and both sexes equally; it attacked all parts of the body, but principally the extremities. The irritation was beyond description; small vesicles rose above the skin, containing a watery fluid, which, upon bursting, appeared to spread the disease.”¹

There is also the “botch of Egypt” of which we read in the Bible: “The Lord shall smite thee in the knees, and in the legs, with a sore boil of which thou canst not be healed” (Deut. xxviii. 35). This was probably a complaint common

¹ Baker, *The Nile Tributaries*, p. 107.

in many parts of the world, and known in Egypt as the "Nile sores." It consists of troublesome ulcers of the legs which appear about the time of the date harvest in August and September, and, in spite of all that is done for them, last for about five months.

These seasonal visitations, however, do not affect the lower animals to the extent called for by the sixth plague; nor does small-pox, which some writers, ancient and modern, have imagined was the plague. It is a plausible conjecture that the fifth and sixth plagues have been combined in the Scripture record. "If we might suppose the narrative of the plagues to be based on a simpler narrative, which would bear to be treated as matter of fact description, we might expect that in the original narrative, the sixth plague represented the plague proper (bubonic) which is confined to man; while the fifth plague stood for epizootic disease in general."¹

That the sixth was bubonic plague is very probable, but it is a mistake to say it is a disease confined to man. "Nor was it mankind alone that the plague thus harassed as with a scourge," writes Nicephorus Gregoras of the Black Death of the fourteenth century, "but all other animals which dwelt with or associated with human beings who took the disease, dogs and horses and fowls as well, and even the mice that lived within the walls of their houses." Similar testimony comes from many other places where the plague has prevailed. Oxen, sheep, deer, swine, goats, buffaloes, jackals, rats, mice, and other animals have all been attacked by it. Indeed, it is a serious question whether epidemics of bubonic plague in cattle have not been mistaken oftentimes for rinderpest. Yersin, a great authority on this subject, states that without making a bacteriological examination it is extremely difficult to

¹ Encyclopædia Biblica, article "Boils."

distinguish the one disease from the other in the lower animals. Others write to the same effect.¹

It adds to the verisimilitude of the sacred narrative to find a murrain in animals preceding bubonic plague in man, for the chronological connection between the two has been observed frequently. In 1842 a severe epizootic in Egypt lasted nine months and was followed by plague, as the people had anticipated. During the famine which prevailed there from A.D. 1064 to 1071, "vehement drought and pestilence continued for seven consecutive years, so that the people ate corpses, and animals that died of themselves; the cattle perished." When the plague raged in Gaza, 22,000 people and most of the animals were carried off within six weeks. An old English chronicle of the plague of the fourteenth century relates that "after this pestilens followed a moreyn of bestis, which had never be seyn." Elsewhere it is said, "The lower animals shared with their masters the affliction of this dread visitation. It was at once a cattle plague, a sheep murrain, and a dog distemper; even the humbler cats and fowls were attacked. In one pasture there died five thousand sheep, and the bodies were so putrid, that neither beast nor bird would touch them. All this abroad as well as in England." So in modern times. In North Africa, India, China, epizootics with a very heavy mortality have preceded outbreaks of bubonic plague.² In the light of these indisputable facts, the conjunction of the two scriptural plagues is very remarkable, and points strongly to

¹ "Many septicæmic diseases met with in animals are analogous to plague in man. From a clinical point of view, the appearances presented by such animals have so resembled plague that Orientals are firmly convinced that epidemics of a similar disease to plague break out among their animals some time previous to the occurrence of plague in man" (Hunter, *The Lancet*, July 14, 1906).

² Simpson, *Treatise on Plague*, pp. 22, 46, 89, 98, 100, 103, 127.

the sixth plague having been bubonic, whatever the fifth plague may have been.

The plague season in Egypt, within the period of exact records, has begun as early as September and as late as January, has reached its height in March and April (the time of the Jewish Passover), and has ended with great regularity, almost suddenly, in the latter part of June.

Epidemics of plague vary greatly in virulency and diffusive power. The medical observers of the Egyptian epidemic of 1834–35 state that the great majority of the population felt its influence, though not actually attacked by it. Those suffering from this *Aura pestilentia*, as it was called, had painful glands in the groins and armpits, the pain being usually slight but increased by pressure or movement of the muscles. Other symptoms were malaise, giddiness, want of appetite, etc. Those affected did not cease from business. Undoubtedly this was plague itself, but in an extremely mild form. In the next degree of severity, besides the symptoms just mentioned, there were observed slight feverishness, frontal headache, altered expression of the face, nausea sometimes followed by vomiting, *buboes and superficial carbuncles*, which appeared together or one after the other in different glandular regions. The buboes terminated by resolution, suppuration, or induration. The patients seldom took to bed, and the termination was never fatal.¹ This mild form of plague is known as *pestis minor*. It was the sixth plague.

“Buboes with superficial carbuncles” may well be considered the equivalent of “boils with blains.” Terms descriptive of affections of the skin have always, and in every language, been used very loosely. Thus in the English registers of the fourteenth century the external symptoms of plague are de-

¹ Simpson, *Treatise on Plague*, p. 163.

scribed as knobs, swellings, kernels, biles, blains, blisters, pimples, wheals, plague-sores.¹ In some epidemics, there is an eruption of pustules resembling small-pox. The presence of "blains" with the buboes or "boils" may also be accounted for by the fact that plague would find many of its victims among those with "Nile sores" and other cutaneous affections of the lower limbs, for the virus of the disease clings to the soil, whence it readily gains entrance into the system through any breach of continuity of the skin. It has been argued with great cogency that the elaborate pains taken in the best period of ancient Egypt to preserve soil from putrefying animal matters were inspired by the risk of plague, and must have been effective to a high degree.

This *pestis minor* afflicted large numbers of the Egyptians with more or less severity. No rank of life escaped; for, while gaining an easy entrance into the houses of the poor, plague also creeps into kings' palaces. "For whether they differed from one another in dwelling places or in manner of living, or in their pursuits, or any respect whatsoever, so long as the plague prevailed, the differences availed them not."² Many royal personages have fallen victims to it. In the Justinian epidemic, it touched the person of the emperor. King Hezekiah fell sick with it.³ The Assyrian king, Assur-nazir-pal I. the son of Samsi-Rimman, evidently suffered from it, to judge by his address to the goddess Istar:—

"In what have I sinned against thee?
 Why hast thou allotted me disease, boils, and pestilence?
 Is this thy just decree?
 I am broken in pieces, and rest I find not
 On the throne of my kingdom."

¹ Barnes, *History of Edward III.*, p. 432.

² Procopius, *De Bello Persico*, lib. ii. c. xxii., xxlii.

³ *Biblical Epidemics of Bubonic Plague*, Bibliotheca Sacra.

From the remarkable words spoken by Moses to Pharaoh at the close of the sixth plague, it is more than probable that Pharaoh himself was smitten with the disease.

Such an event must have stirred profoundly the minds of the Egyptians. To them the reigning sovereign was the living image and vicegerent of the sun-god. His divinity was proclaimed not only by himself in official documents, but also by his people in their literary effusions, and in works of art even more eloquently than by words.

"... What spires are to a modern city—what the towers of a cathedral are to its nave and choir—that the temples of the Pharaohs were to the streets and temples of Thebes. The ground is strewn with their fragments; there were avenues of them towering high above plain and houses. Three of gigantic size still remain. One was the granite statue of Rameses himself, who sat on the right side of the entrance to his place. By some extraordinary catastrophe, the statue has been thrown down, and the Arabs have scooped their millstones out of his face; but you can still see what he was—the largest statue in the world. Far and wide that enormous head must have been seen, eyes, mouth and ears. Far and wide you must have seen his vast hands resting on his elephantine knees. You sit on his breast and look at the Osiride statues which support the portico of the temple, and which anywhere else would put to shame even the statues of the cherubs in St. Peter's—and they seem pigmies before him. His arm is thicker than their whole bodies. The only part of the temple or palace at all in proportion to him, must have been the gateway, which rose in pyramidal towers, now broken down, and rolling in a wide ruin down to the plain.

"Nothing which now exists in the world can give any notion of what the effect must have been when he was erect. . . . No one who entered that building, whether it were a temple or palace, could have thought of anything else but that stupendous being who thus had raised himself up above the whole world of gods and men.

"And when from the statue you descend to the palace, the same impression is kept up. Everywhere the king is conquering, worshipping, ruling. The palace is the Temple, the king is priest. But everywhere the same colossal proportions are preserved. He and his horses are ten times the size of the rest of the army. Alike in battle and in worship, he is of the same stature as the gods themselves. Most striking is the familiar gentleness with which—one on either side—they take him by each hand, as one of their own order,

and then in the next compartment introduce him to Ammon and the lion-headed goddess. Every distinction, except of degree, between divinity and royalty, is entirely levelled, and the royal majesty is always represented by making the king, not like Saul or Agamemnon, from the head and shoulders, but from the foot and ankle upwards, higher than the rest of the people.

"It carries one back to the days when there were giants on the earth. It shows how the king, in that first monarchy, was the visible God upon earth. . . . No pure Monotheism could for a moment have been compatible with such an intense exaltation of the conquering king" (Stanley, *Sinai and Palestine*, p. xxxv).

The Egyptians were therefore thoroughly disheartened by their king's illness. When the emperor Justinian lay sick with the plague, the public consternation was so great as to paralyze all industry, and the idleness and despondency of the people occasioned a great scarcity of food. The consternation of the Egyptians must have been far greater, because of their deeper veneration of Pharaoh. And to them there was no incongruity between his divinity and his sickness. Under the name of god, they did not understand, as we do, a being without body, parts, or passions; the gods are described as suffering from hunger and thirst, old age, disease, fear, and sorrow. They perspire, their limbs quake, their head aches, their teeth chatter, their eyes weep, their nose bleeds, "poison takes possession of their flesh, even as the Nile takes possession of the land." They may be stung by reptiles and burnt by fire. They shriek and howl with pain and grief. All the great gods require protection. Osiris is helpless against enemies, and his remains are protected by his wife and sister. Hathor extends her wings as a protection over the victorious Horus; yet Hathor in her turn needs protection, and even the sun-god Rā, though invested with the predicates of supreme divinity, requires the aid of the goddess Isis.¹ To the Egyptians the king's illness was an appalling sign of the hour and the power

¹ Renouf, *The Religion of Ancient Egypt*, p. 89.

of their great Adversary, and their hearts were troubled and afraid.

What was the effect of his illness upon the king himself? Despite the prospect held before his imagination of meeting the gods in the next world on friendly, almost equal terms, he was probably no more anxious to leave this world than the poorest of his subjects. And the thought confronted him that, after death, he too had to stand in the presence of the "mighty god, the Prince of everlastingness, who counteth his years, who hearkeneth unto those who are in the islands, who raiseth his right shoulder, who judgeth the divine princes," and have his heart weighed in the Great Balance in the Hall of Double Truth. Considering his rank and the times in which he lived, it is not to be supposed that he had the delicate conscience of the Christian, but judging him only by the Egyptian standard of right conduct, what grounds had he for thinking the verdict would be in his favor, that it would be decreed no wickedness was found in him? When he remembered his treatment of the Hebrews he could not honestly plead: —

"In truth I have come to thee, and I have brought right and truth to thee, and I have destroyed wickedness for thee. I have not wrought evil. I have not made it to be the first consideration of each day that excessive labor should be performed for me. I have not ill treated servants. I have not thought scorn of God. I have not caused misery. I have not caused affliction. I have not caused pain. I have made no man to suffer hunger. I have made no one to weep. I have not inflicted pain upon mankind. I have not repulsed God in his manifestations."¹

In all these things his conscience reproved him.

Doubtless the priests offered prayers for his recovery, and performed their rites and incantations; but was not the king's heart softened by his illness, for the time at least, and did he not himself pray for the prolongation of his days to that hid-

¹ Book of the Dead, Introduction to Maati, Papyrus of Nu, sheet 22.

den, inscrutable, and almighty God, in whom the best and wisest of the Egyptians secretly believed,—One who, in that land of multitudinous idols, had neither ministrant nor offerings; who was not adored in sanctuaries, or in shrines with painted figures;—the Lord of mercy, most loving, at whose coming men live? It would seem so, for the king recovered, and hardened his heart, but the heart is only hardened by its wilful resistance to truth and goodness.

In the sacred narrative nothing is said as to the cessation of the plague. In accordance with its usual course, it lasted therefore during the months of winter and spring, subsiding spontaneously on the approach of the hot weather, for it is a disease much influenced by seasonal changes. But in Egypt, as in other countries where plague is a frequent visitant, the epidemic of *pestis minor* in one year is often the precursor of an epidemic the next year of plague in its most contagious and malignant forms.¹ Such was to be the course of events in this series of plagues. Moses comes before Pharaoh, reproves him for his pride and perversity, and then gives stern warning of a second and far more terrible visitation of plague. "For I will this time send all my plagues upon thine heart, and upon thy servants, and upon thy people. For now had I put forth my hand, and smitten thee and thy people with [the full strength of] the pestilence, thou hadst been cut off from the earth: but in every deed for this cause I have made thee to

¹ *Pestis minor* has been observed in Mesopotamia preceding severe epidemics of ordinary plague: in the city of Astrakan in 1877 (the year before the severe outbreak in that province) and elsewhere. (Allbutt, *System of Medicine*, vol. 1. p. 928.)

It has been remarked on two occasions in Russia and in Persia, that outbreaks of plague were preceded by a sporadic or epidemic febrile, sometimes afebrile, affection in the course of which the lymphatic glands became enlarged and perhaps suppurated. (Manson, *op. cit.*, p. 150.)

stand [i.e., have raised thee up from sickness], for to show thee my power" (Ex. ix. 14-16; Rom. ix. 17).¹

So the national tragedy is not yet complete. The mills of God are to grind further, and to grind exceeding small. As stated by an old writer, God executed his judgments upon Pharaoh and his people by little and little, giving them place of repentance, not being ignorant that they were a naughty generation, that their malice was bred in them, and that their cogitations would never be changed. (Wisdom of Solomon xii. 10.) This ends the first cycle of plagues; it lasted about one year.

¹The word *ἐτήρσα* is taken to mean, "I have raised thee up from sickness," "I have preserved thee, and not taken thy life as I might have done." This is in all probability the meaning of the original Hebrew, "I made thee to stand." It is certainly that of the Septuagint, which paraphrases the words *διετηρήσθης*. It is supported also by a reading in the Hexapla, *διετηρήσά σε*; by the Targum of Onkelos, *Sustinui te ut ostenderem tibi*; and the Arabic, *Te reservavi ut ostenderem tibi*. *Ἐτήρσα* is used (1 Cor. vi. 14) of resurrection from the dead, and the simple verb *ἐτέλει* in James v. 15 means "raising from sickness." (Sanday and Headlam, International Commentary on Romans, on ix. 17.)