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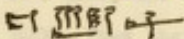
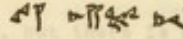
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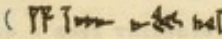
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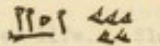


THE HEALING METHODS OF ERIDU IN THE BABYLONIAN EPIC.

The antiquity of the healing to be obtained at the great sacred city of Ea, the Holy City of Eridu, is clearly established by the references to it, not by name but by inference, in the Babylonian Epic.

In the later tablets of the Epic, beginning with the Xth, we find the hero Gilgames (  ) or Nimrod, suffering from a terrible disease, evidently leprosy, and in great fear of death. In his trouble he endeavours to find one from whom he can learn the secret of immortality, and is told that there is only one being who can reveal this to him, namely Pir-napisti (  ) the Chaldean Noah, who has been translated by the god Bel after the Deluge, and who dwells in the "holy land of Chaldea, the region at the mouth of the rivers," that is, the region on which the holy city of Eridu was situated.

He therefore resolves to go to this mysterious region which lies beyond the sea or Ocean (Absu) the special dominion of Ea, and to learn from the sage the secret of immortality. It is a journey of great length and difficulty, and the waters of the Ocean called "the waters of Death" (  nie muti ) none can cross except in the spirit after death. He is told that the only one who has crossed the waters is the Sun-god, who each day sails across them, <sup>or</sup>ing from them and returning to them. Here we have a mythological idea similar to that of the voyage of the Egyptian Ra each day across the Celestial Ocean.

He is however told that he may possibly be conveyed to the mystical region where the immortal sage Pir Napistim dwells, if he can induce the boat-man or ferry-man, Ardi-Ea or Amil Ea (  ) <sup>Amil</sup> ~~Ardi~~ Ea malahi ) whose name means the Man or Servant of Ea, and in whom we may recognise another form of the semi-divine being, Adapa, "the all wise

he came (restored) to health (subai).



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one," the Babylonian who was the god of sailors and fishermen, to carry him across.

This connection is extremely interesting, as it proves the great antiquity of the school of healing of Ea at Eridu, for recent discoveries at Nippur of tablets of the deluge story and the Epic, dated in the reigns of the Kings of the first Babylonian dynasty, B.C. 2200, shew that the Epic was drawn up at that time, and the engraved gems and seals, dating between B.C. 2500 and 3000, shew that it is contemporary with the earliest days of Semitic Babylonian literature, so that the antiquity of the school of Eridu is beyond doubt.

The mythological matter in the Epic is of little importance to the subject of the history of medicine, but there is a valuable section devoted to the method by which Gilgames was cured of his disease.

The sage Pir-napistim is moved to sympathy by the terrible affliction of Gilgames, and endeavours to heal him; and as in Pir-Napistim we may see a reflection of the god Ea, we have a description of the healing methods of Eridu. He first sends him into a deep sleep. "The life thou seekest thou wilt obtain. Sleep." "The deep sleep lasts six days and seven nights." And again "Sleep has fallen on him like a storm." We now come to a most valuable passage. The sage Pir Napistim does not undertake the cure himself, but delegates it to his wife, a fact which points to the existence in Eridu of healing priestesses or witch doctors, a custom which no doubt gave rise to the belief in goddesses of healing, such as Damkina the wife of Ea, and Gula his daughter.

We now come to a distinctly magical ceremonial.

Pir Napisti spake to his wife, saying,

"Look at the great man (hero) who desires life. Sleep like a storm-cloud has overcome him." His wife said to Pir-Napisti, "That he may be changed let him eat of the Magic food. Let him then return by the way he came (restored) to health (submi).

## 3.

Let him go forth from the gate that he may return to his land."

"The affliction (ragget) of the man is evil in thy sight," said Pir-napistim. "Cook the vegetable food (Kurumat means "a mess of vegetables"), and place it as his head."

And by day, as he slept on the side of his ship, she cooked the food and placed it at his head. And by day as he slept on his ship, first she cooked his food, the mess of vegetables. Secondly she peeled the herbs. Thirdly she moistened it. Fourthly she made bright his bowl. Fifthly then the Shiba plant (the plant of Old Age) she added. Sixthly she boiled the mess of magic food. Seventhly suddenly the man awoke and he ate the magic food.

This food called TU or TUM, is a magic witches' broth, which caused the man in a trance to awake.

This passage would seem to indicate that many of the cures in the Babylonian temples, especially at Eridu, were effected by the preparation of magical potions which the patients partook of on waking.

The cure is only partially complete, and Pir-napisti now directs Arad-Ea or as we may conjecture, Adapa, to take and purify him.

He said to Arad-Ea, "The man thou hast brought to me, his face is covered with sores. The ulcers on his skin destroy the beauty of his body. Take him, Arad-Ea, and carry him to the washing place and wash his sores in the water that he may become pure as snow, and that his body may become fair, and the hair (bar sigg<sup>u</sup>, "hair" not head dress) of his head be restored. And replace the garment that covers his body. Let the sea carry away the eruption of his skin. Then he may journey to his city. Then he may take his way on his journey."

The description of the disease, brief as it is, points almost directly to that of leprosy, especially as the exclusion from his city is referred to, as well as the giving of new clothes.

From the above details gathered from the Deluge tablet, it appears that



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about B.C. 2000 the system of treatment was:-

1. The patient was put to sleep, probably by an opiate.
2. A magical food or potion was prepared which the patient took on waking.
3. The final purification was by bathing in the sea, probably from a washing place on the sacred quay.

In the case of Gilgames, his sickness was cured, but he did not gain the gift of "immortal life," which only could be obtained by the gift of the gods or by possessing "the plant of life" which like the Tree of Life in Hebrew tradition, was denied to men.

and in a large number of cases they are those which had formerly belonged to Ea.

There is a tablet in the British Museum, N. 4356, which contains a very valuable list of the titles of Ea, which has not hitherto been published, and which shows his dominant position in Sumerian theology.

The titles are:-

- Ea of Heaven and Earth.
- Ea of creation.
- Ea of the world.
- Ea of wisdom.
- Ea of all things (gisheri).
- Ea of bright shining.
- Ea the god of sorcery.
- Ea the god of healing and death.
- Ea of healing.

This list can be further supplemented by the "Great God Tablet" which has just been published by the British Museum and which gives a number of epithets of healing. Thus Ea is called Ea an and Ea Agu. "The wise lady" and "the lady of healing." So also the same epithets are

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applied to Dam Kina the wife of Ea. The use of these epithets show that women took a considerable part in the medical treatment of the sick. It is interesting to notice that in the medical magic of Ceylon nearly all the treatment is performed by women.

BABYLONIAN - ASSYRIAN MEDICINE.

1. It dates very far back; to the middle of the 4th. century B.C., if not farther. The later cuneiform medical inscriptions show the whole system to have been, in general principle, firmly established, as we find it recorded on a cuneiform tablet of the 7th. century B.C. At the time of King Gudea (c.2000 B.C.) quantities of these texts were in use. A certain doctor Urugaliden, whose seal cylinder has been preserved, lived at this time. The term asu, meaning 'doctor', but which might be better rendered, perhaps, as 'surgeon', was also then in use. (v. Artt).
2. A pre-Babylonian, as well as a pre-Semitic, hyperphysical magico-therapy, the interpretation of dreams in connection with the blood as opposed to the body and soul, existed in Sumerian culture, but besides this a system of therapeutic prescriptions, built up empirically on the basis of their knowledge of plants and minerals, has also been proved. Generally charms were combined with acts of ritual, partly of a symbolic nature, while therapy by prescription was carried out by physical measures; this state of things lasted into later Babylonian-Assyrian medicine with an ever closer inter-mixture and fusion of the two methods.



The specifically medical texts, of which from the Library of the Assyrian King Sardanapalis (Assurbanipal) alone over 1000 fragments of clay tablets from the ruins of Nineveh have come down to us, give evidence of a fourfold method of treatment: charms for exorcism, directions for ritual acts, pharmaco-therapeutical remedies in close connection with physical curative measures, and it is likely that both of these or all four methods were recommended or practised against one and the same illness when diagnosed.

3. The etiology of disease is in its main essentials demoniacal. But the numerous demons, did not, as we might have supposed, determine the cause of any particular disease: as many harmful evil spirits beset men under various typical forms of illness, thus the Ashakku with Fever, the Ti'u with Headaches, the Etimmu with mental troubles, the Labartu with consumption. The conventionally conceived "Plague-God" of the Namtara also for some reason inflicts death only on masses, etc. Similarly, to count the "Headache" as a severe infectious disease would seem to denote no special demon of sickness in general, but it is



naturally to be treated with charms as appealing to the higher gods.

4. The range of pathological states treated of in the various series of tablets is fairly wide. It embraces both physical troubles and nervous diseases (possession by demons of the heart and rest), Optic and Aural complaints (together with loss of sight, deafness, swellings, hypersecretion or xeransis of blood or phlegm), Urogenital complaints (Tubercula, Urocheras, Stone, genital discharges of man and woman, troubles in coition, infertility,) divergence from the normal in labour and the formation of fistulae, complaints of the digestive organs (Mouth and Teeth), Stomach and Intestinal complaints (nausea, vomiting, jaundice, constipation or diarrhoea, hemorrhoids, rectostenosis) diseases of the respiratory organs (including Pthisis), troubles in the functioning of the extremities in cramp, paralysis or laming.

5. The description of illnesses is exclusively symptomatic. The sick person has some trouble (his inwards rise), he vomits, he has colic pains (his inwards gripe or gnaw him), flatulency, no appetite, he writhes in cramps and convulsions. The necessary herbal remedy was

often administered in an intoxicant and the ensuing evacuation was registered. Vomiting was also employed or inversely it was recommended to gulp down the sickness quickly. Besides the taking of physic we also have healing ointments or salves, bathing, poulticing, massage, enema, scarifying etc. as well as various ways of posing and placing the patient. But the exorcism of disease, the manipulation of ritual, was valued above all these and alone esteemed as 'a cunning art'.

6. Experience was often resorted to at the sick-bed, as to which of the mass of medical prescriptions accumulated answered the particular case, more especially since a certain prognosis, either favourable or unfavourable, was unknown. In the latter case it was advisable to desist from all treatment altogether or any rate from farther measures, and to lay one's hand "no more on such a sick man, for he will die." While the simple empiric prognosis - he will recover, he will defecate - was not always perhaps exclusively applied. Magic encroached upon it and was frequently completely took its place.



The oil-test, carried out by means of the prophat-priest, by pouring oil  
onto water and observing it through the sunlight, and which as a test  
was hardly to be contested by anybody and which is not very happily  
called "goblet-prophecy", seems to have been a favourite method of  
divination. (J.Hunger 1903). What, according to the list of duties  
given in the textual sources, it has been ventured to claim as  
parallel to the "Coic Prognosis" of the Hippocratic school and  
similar thinkers still requires to be carefully investigated.

7. How a true diagnosis was finally once arrived at the following  
passage from a series on diseases of the chest may serve to show.  
"When a man in his..... has a fever, is troubled with sharp pains in  
the breast..... his saliva, phlegm, spittle, wasting away of the  
flesh.... he has a severe cough.....he vomits violently, when he  
vomits both his..... not to continue, his legs feel heavy, such a  
man has a disease of the lungs." Such a catarrhal illness indicates  
a humoral nature of the affection not less than "Water of Life" implies  
a life principle, which can be perhaps identified with the blood through

which life flows. The Water of Life is known also as a remedy, as the divine gift of Marduk. Besides the medical directions in the special groups of texts dealing with illness, we also come across isolated medical remedies, occasionally in the form of antidotes to symptoms of disease, remedies and directions for treatment, placed one above the other in columns.

8. Of Babylonian Midwifery and Surgery we still know little.

The clear definitions of the law of Hammurabi referring to evil effects in the event of surgical intervention, were wholly unequal to keep surgery within the prescribed limits or along the prescribed lines.

(see Arst. Chirurgie).



29.7.10.



ANCIENT MEDICAL HISTORY. I.

SUMERIAN.

In the wonderful "retrospective enlargement" of our knowledge of the beginnings of the world's history and civilisation which has resulted from the work of the explorer, the archeologist and the decipherer, all branches of knowledge have had new chapters relating to their first beginnings rescued from the oblivion of centuries. In regard to the dawn of scientific knowledge, the material obtained has been of the highest importance and the birth place of most of the sciences are now to be found in Eastern lands.

No longer are we dependant on tradition - "the last flicker of the lamp of history" - as to the birth lands of the sciences of astronomy, mathematics, and geometry. So in like manner we find that it was beneath Eastern suns, that the first elements of medicine and the sciences associated with it were developed. The important explorations and discoveries made in the Tigris-Euphrates Valley have proved beyond all doubt that it is to the ancient Sumerian people of Babylonia, that we owe the beginnings of astronomy, of mathematics, and many of the first principles of medicine, botany and pharmacy.

To Egypt we may trace geometry and chemistry, and many important elements of the beginnings of medicine.

To form any idea of the beginnings of medicine or "the healing art" it is necessary to go back to the childhood of the human race, to that stage when man is struggling to solve the problem of his own existence and his own position in relation to the wide realm of Nature. Just as one of the earliest steps in religious development is the recognition of the law of dualism in Nature, of the eternal warfare between Light and Darkness, Heat and Cold, which lead to the arrangements of the power of Nature into two camps, so it was the recognition of the dualistic warfare between Happiness and Pain, Health and Disease, that led to the beginning of a religious ritual by which man sought to combat the powers of Evil and Sickness, just as in religion by the invocation of the powers of

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Light and Goodness, he sought to overcome the powers of Darkness and Evil.

Sickness and Disease thus became one of the powers of Evil and Darkness, and had to be combatted by a regular ritual, hence we find that the earliest medical men were priests or magicians.

#### Dualism of Priesthood.

With the recognition of the law of Dualism in Nature there grew up a dual priesthood.

The religion of the world in which Nature dualism is the most pronounced element is that of the Zoroastrians, now represented by the modern Parsees, and from their sacred book, the Avesta, a passage which throws great light on the origin of Evil may be quoted - "Angra Mainyu (the evil one) who is all death, created the evil work of witchcraft."

Thus there arose a dual hierarchy in this Religio-Magical Stage, a priesthood of White or Protective Magic and another of Black or Vindictive Magic or Sorcery.

#### Animism.

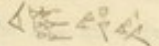


In the hierarchy of the former of these we have the genesis of the medical profession. Babylonia, in the time of the Sumerian domination, presents us with perhaps the oldest and most primitive form of religious belief, namely that of Animism. Animism consists in belief that every object in Nature has a life or soul dwelling within it, which was amenable to influences good or evil, and could be controlled or coerced. Thus objects which were good and beneficent to man were classed as good spirits, those which possessed malevolent characteristics as evil. Naturally among the spirits of evil would be classed those which ruled diseases, and which by entering into man inflicted pain and sickness on him, and it was the duty of Medico-Magicians to devise ceremonies and means for their removal.

#### Word for Disease.

The nature and character which the Sumerians attributed to disease and sick-

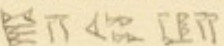
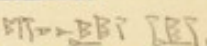


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ness is best ascertained by the study of the idiographs or sign groups used to represent it.  which had the Sumerian reading 919 0774-1474 and was explained by the Semitic Marzu 𐤎𐤌𐤍𐤏, "sickness." The sign is composed of two diagrams combined,  "black or evil" and  "much." It is also explained by KISSU, "trouble, affliction" and KIBTU, "depression." All these expressions amply explain the meaning of sickness and illness.

This group is found in all the early magical inscriptions as the sign for sickness or disease, especially in the large magical tablet of diseases first published by Rawlinson and afterwards commented on by Lenormant. Here the diseases or the spirits which ruled them were chiefly exorcised by means of invoking the two most powerful spirits of the Spirit hierarchy, the "Spirit of Heaven and the Spirit of Earth."

#### The Physician.

The persons who recited the incantations were usually magicians attached to the temples, but soon these became consolidated into a caste called A.ZU, literally (Men) of Wisdom or Wise Men. The word was borrowed by the Semitic in the form of ASU, and passed into Hebrew and Aramaic in the form ASA, "Doctor or Healer." The head of the caste was known by the name of A.A.BA.ASA, or chief physician. The earliest mention of a physician is in the inscription of Manishtusu, King of Kish about B.C.4000, when a physician named MA-NA-A is mentioned. Later we have several mentioned, and about B.C.1450 we have a certain Samilu  who is called rat A-si surri, chief of the royal physicians; also a certain physician named Martuku  who was attached to the temple of Ellil or Bel at Nippur. One of the gates of this temple was called the gate of the Physicians.

That the physicians were a recognised body of Babylonian society is proved by special clauses being embodied in the Code of Khammurabi relating to them.

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(B.C.1950.) Clause 15. If a physician (asu) has treated a free man for a severe wound with a bronze lancet and has cured the man, or has removed a cataract from the eye of a free man with a bronze lancet, and has cured the eye of the free man, he shall take ten shekels of silver.

Clause 216. If the patient be a poor man, he shall take five shekels of silver.

Clause 217. If the patient be the servant of a free man the master of the servant shall give two shekels of silver to the doctor.

Clause 218. If the doctor has treated a free man for a severe wound with a lancet of bronze, and has caused the free man to die, or has removed the cataract from the eye of a free man with a bronze lancet and has caused the loss of the free man's eye, one shall cut off his hand.

Clause 219. If a doctor has treated the severe wound of a slave of a poor man with a bronze lancet, and has caused his death, he shall render slave for slave.

Clause 220. If he has removed a cataract with a bronze lancet, and made him lose his eye, he shall pay in money half his price.

Clause 221. If a doctor has cured the broken limb of a free man, or cured a diseased bowel, the patient shall give five shekels of silver to the doctor.

Clause 222. If he (the patient) is the son of a poor man he shall give three shekels of silver.

Clause 223. If he is the servant of a free man, the master of the slave shall give two shekels of silver to the doctor.



10.8.10.



THE STAGE OF MAGICAL MEDICINE.

The earliest stage of medicine which is found in Chaldea, is that of pure magic, when the diseases are treated as a form of demoniacal possession, and they or the evil spirits which represent them require to be exorcised by the invocation and action of more powerful benevolent spirits. This stage is best represented by a large tablet in the British Museum, just printed by Rawlinson (*Western Asiatic Inscriptions*, Vol. II, plate 17 - 18). It consists of a number of magical incantations against diseases, one column on the right hand being written in Sumerian, with an Assyrian translation in the next column. The text as we now possess it, dates from about B.C. 650, but the original Sumerian text may with certainty be dated back to B.C. 2200 at least, if not earlier.

The tablet opens with a number of general exorcisms, but soon we come to ailments and diseases definitely classified, and the description of which often exhibit a very keen diagnosis.

The first paragraph, which is purely medical, is one relating to the diseases of women, especially of the suckler (musenick) or wet nurse, who was a most important functionary in Babylonia.

K/.

The paragraph reads:-

The nurse whose breasts are sweet.

The nurse whose breasts are bitter (marru).

The nurse whose breasts are bruised (sakhu).

The woman who from a bruised breast has died.

(Conjure O Spirit of Heaven, conjure O Spirit of Earth).

This protection of infant life in Babylonia where so many adopted children were put out to nurse was most important, and the subject finds a special clause in the code of Hammurabi (Sect. 194), "If a man has

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given his child to a wet nurse, and that child has died in the hand of the wet nurse, and the nurse without the consent of his father and mother has procured another child, they shall call her to account, and because without consent of his father and mother, she has procured another child, they shall cut off her breasts."

The expression bruised breast is interesting, as it would seem to indicate a knowledge of the tendency of the blow on the breast to produce cancer.

The next section relates to diseases of pregnancy:-

- The pregnant woman whose womb is closed.
- The pregnant woman whose womb is rent.
- The pregnant woman whose womb is loosened.
- The pregnant woman whose womb is displaced (not straight or upright).

(Conjure O Spirit of Heaven, conjure O Spirit of Earth.)

It is clear that the last two troubles relate to cases of prolapsus, whether natural or caused by violence. Cases of assault on women which caused premature birth were especially legislated for in the Code of Hammurabi (Clauses 209 - 214).

The next sections relate to fevers and epidemics, and contain no details of special medical importance.

The next section is, however, of interest, as it contains accurate descriptions of colic and dysentery.

- The disease of the bowels, the sickness.
- The disease of wasting away.
- The disease that departs not, the disease of wasting away.
- The disease that seizes suddenly.
- The disease that comes not forth, the evil disease.

Here we seem certainly to have a very accurate diagnosis of cholera, possibly cholera and dysentery.



3.

We come now to a paragraph which is of value. "The spittle (arsasu) and breath which are foully formed in the mouth is the expectoration of the spittle which is foully thrown out." The Babylonians had very early recognised the insanitary nature of spittle or saliva, and in the great inscription of Gudea, B.C. 2500, he states that "they removed all excretions and spittle from the streets of the city."

This passage is of much interest, as it gives a valuable list of things regarded as insanitary, and they are curiously like those prohibited by the Jewish law.

The shavings of the body, the parings of the nails rags.

The droppings of water from the body.

The food which <sup>is</sup> excreted from the body.

The food which is returned in eating.

The water which in drinking is spat out.

The evil breath which the dust hides not.

The wind which goes away to the desert.

(Conjure O Spirit of Heaven, conjure O Spirit of Earth.)

This passage contains proof of a considerable knowledge of sanitation and of the things that tended to produce disease.

A paragraph which shows some medical knowledge may be noticed:-

Sickness of the bowels.

Sickness of the heart, palpitation of the heart.

Sickness, disease of the bile (martu, gall or bile), vomit.

Headache (marutzu kakadi).

An evil blood vessel, diseases of the kidney.

Evil miction (imsi).

The sickness which cannot be removed.

An unfavourable dream.

(Conjure O Spirit of Heaven, conjure O Spirit of Earth.)



4.

Here we have, considering its antiquity, a very good diagnosis of liver and kidney troubles; but of course as yet no attempt at medical treatment, all the sickness being attributed to demoniacal possession.

These tablet books belong to the age when the wise man, magician, or medicine man exercised his mysterious powers chiefly by magical incantations by pitting the powers of good against those of evil. The value of these inscriptions is principally to be found in the crude diagnosis of the diseases as expressed by the Sumerian diagrams, and in the way in which certain ailments are classified together, showing the beginnings of a common sense system of medicine.

As time advanced, the common, often, we expect, the itinerant, magician became attached to certain shrines, and there grew up medical schools or castes under special divinities. The medicine man now begins to combine the dual offices of priest and magician, and the treatment of the sick became a matter of ritual and ceremonial. The invocation or use of the name of a special divinity, not merely of the abstract conception of the "Spirit of Heaven and Earth" became the principal spells used to expel the demons of disease from the body of the sick man.

Here we get quite a new formula:-

The priest magician says:-

"I am the man of Ea.

I am the man of Dam Kina (wife of Ea).

My spell is the spell of Ea.

My incantation is the incantation of Marduk.

The ban (uzurat) of Ea is in my hand.

The tamarisk, the powerful weapon of Anu, I hold in my hand.

The spathe of the date, which is mighty in decision, I hold in my hand.

May they not draw nigh into my body.

Before me may they wreak no evil.

5.

Nor follow behind me.

On the threshold where I stand let them not sit themselves.

Where I stand stand thou not!

Where I sit sit thou not!

Where I enter enter thou not!

Be thou exorcised by the Spirit of Heaven, be thou exorcised by  
the Spirit of Earth.

Here the magical ritual has undergone a very considerable elaboration,  
although the exorcism by the two spirits is the same, the names of power-  
ful divinities, and the use of certain ceremonies and offerings.



Notes on Chaldean Medicine.

- teaching on the cuneiform tablets the preference
1. The tent was the natural dwelling place of the Semite, who had come from the Arabian desert. The Akkadian dwelling place was the cave, as shown by the archaic form of the earliest sign for house a cave, which was replaced by the read built hut and then by the brick house.
  2. Meteoric iron. Iron does not appear until late, and it is doubtful if iron was worked or used in Babylonia or Assyria to any great extent. It is never mentioned in the building inscriptions until the Persian age, and no Assyrian iron swords are found.
  3. I should omit references to Nimrod. The order of kingdoms is important as that of Hebrew record is exactly the reverse of monuments, the Hebrew writers being retrospective.  
Bible -- Babel, Erech, Akkad, Kalneh.  
Monuments -- Kish, Akkad, Ur, Babel.
  4. In studying the mythology of ancient Chaldaea there are several points of great importance to be observed. the same rivalry which we meet with in Medicine and Mythology. The myths of Chaldaea in like manner as the civilization, were the products of more than one school of thought, and became at a later time fused into one, never, however, becoming so associated as to form one simple system there being always evidence of the component parts. There were, therefore, two distinct schools of medical



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teaching on the cuneiform tablets the preference being given to the Akkadian. The reason for this is worthy of notice. They invented the cuneiform writing. Ideograms express various diseases, the invention being exactly parallel to Chinese writing and the Chinese, we know, were descended from the Akkadians. These two distinct and widely different schools of thought are clearly to be recognised and these diversified elements acted upon each other, in such similar manner to chemical compounds producing a third, from which, in time, combined with other elements and thus produced the composite product known as the Babylonian religion.

In the study of medicine in relation to religion and mythology, it is essential to remember these various combinations.

The two principal sources, widely different in character, are the Akkadian and the Semitic. For these, however, two new names may be substituted - the Agricultural and the Nomadic - the farmer and the shepherd. It is the same differentiation, the same rivalry which we meet with on the threshold of Hebrew history - in that chapter of Genesis, which may be styled "the Hebrew legend of civilization", the conflict between Cain, the tiller of the soil, and Abel, the agriculturalist.

Each of these classes were close observers of nature, each of them looked with wondering eyes

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upon the glorious Sun, the cool silver Moon, the flock-like stars, the fleecy-white or dark, moody storm laden clouds, the rain and the winds - each in his own way sought to solve the problem of nature, and to seek for the strange divine power that ruled and regulated these phenomena.

Each, however, regarded these objects or phenomena of nature from different, we might almost say, antipodean view. To the agriculturalist, the day was the most important period, and the Sun his lord of lords. It ripened his corn, and the rain and the gentle winds brought moisture to his land.

By the nomad, the sun and the wind and the storms were regarded as enemies. It was the sun who burned up his pastures and watering places. He turned rather to the moon from whom came cool dews and the rain and the stars, who told him of the seasons and guided his path in the desert.

This distinction of the point of view with which each party regarded nature is set forth in the varying phrase-indicating time, where the Akkadian said "Day and Night", the Semitic country of nights said "Night and Day". This marked distinction is maintained throughout the whole of the mythological and religious literature of Chaldea.

The Akkadian solved his theory of the universe by regarding all objects in nature as the abodes of an indwelling spirit, which controlled spirit - "the malicious spirit" of the liver or heart



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its actions, and, by dividing the realm of nature  
remedy, therefore, lay in the exorcising of that  
into two camps of beneficent and malevolent spi-  
rit by charms and incantations, or by the driv-  
ing forth of it by some more powerful spirit. At  
among the Akkadians.

The Semite with a keener analytic faculty saw  
moved by the use of charms, to  
one supreme power ruling, guiding, and directing

The Semite who considered himself as the  
all, which attributing divinity to the various  
son of his god, regarded sickness as the result  
realms of nature still recognised a supreme being  
of the power of his god, and that this god  
who controlled and directed all. It was this di-  
treatment consisted of forms of purification  
vinity who created man, and with whom he stood in  
This is best shown by the study of the two words  
the position of divine father.

Ancestor worship comes from the tribal god  
"black" - "evil" - "bad" - which was rendered  
(See Robinson Smith's Religion of the Semites).

into Semitic by means which had the meaning of -  
The land belongs to him, and so he becomes the  
"opposition" - "pain" - "difficulty". The Semite  
tribal god. Ancestry goes further and further  
the word for medicine, however, is a better indi-  
back as the tribe's history goes back. There is  
cation AMI, the Aramaic "to heal", but which  
no concrete ancestor in the tribe's history. To  
has the primary meaning of to purify, to wash  
attempt to find a concrete ancestor is like try-  
This word is the origin of the word called the  
ing to find Adam. The ancestral divinity created  
man. He was the divine father. The stronger

There therefore arose two distinct schools of  
spirit could drive the lesser ones out.

We have to consider the above mentioned  
of each are preserved to us in the cuneiform  
differences in treating of the subject of medicine  
lists, and of both of these there are numerous  
among the ancient Babylonians. The whole raison  
explan.

d'etre of medicine, it must be admitted, depends

The preference must rather be given to the  
upon the theory which a people form of disease.

Akkadian, and the reason for this is worthy of  
The Akkadian from the animistic nature of his  
particular action.

creed regarded disease as possession by some evil

The Akkadians were the inventors of the magical  
spirit - "the noxious spirit" of the lung or heart  
were driving, and they exhibited a wonderful

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or eye, or whatever might be afflicted. The remedy, therefore, lay in the exercising of that spirit by charms and incantations, or by the driving forth of it by some more powerful spirit. At the same time disease was to be prevented or removed by the use of charms, &c.

The Semite who considered himself as "man the son of his god", regarded sickness as the result of the anger of his god, and most of his medical treatment consisted of forms of purification. This is best shown by the study of the two words employed for sickness. In Akkadian "gis" meant "black" - "evil" - "magic" - which was rendered into Semitic by marzu which had the meaning of - "opposition" - "pain" - "difficulty". The Semitic word for medicine, however, is a better indication asu, the Aramaic "to heal", but which has the primary meaning of to purify, to wash. This word is the origin of the sect called the Essenes, the washers.

There therefore arose two distinct schools of medical treatment, and the literatures of each are preserved to us in the cuneiform tablets, and of both of these there are numerous examples.

The preference must rather be given to the Akkadian, and the reason for this is worthy of particular notice.

The Akkadians were the inventors of the cuneiform writing, and they exhibited a wonderful



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Among the Arabs of this district, consumption, an inventive power in formulating their diagrams to *maria*, "the serious disease of the marks", as it is express the various diseases. Indeed we have called *Ophthalmia* - in later inscriptions we here an exact parallel to the Chinese, whom we find mention of the scaling disease of the skin, know to be akin to the ancient Akkadians. The either a form of cancer or scrofula. As in the sign for the disease is often a primitive diagnosis of its many features. Thus consumption is subject to various forms of ulcers and boils, "the wasting disease", and the "noxious sputa of and of these a list is given at the end of these the lips" - ophthalmia "the noxious pus from the eyes". Among the most prevalent and dreaded of eyes". The well-known "button d'Alup" - the disease must be mentioned leprosy. The boil Baghdad button - is most accurately described which precedes it, may appear either on the arm as the "button of the year". The fevers, plagues, or neck of the natives and it lasts 12 months like and various epidemics which infest the East at the the Delhi button and heals up scars leaving a brown present time seem to have existed in the earliest stain. It is called the date mark because it is times of which we have record, and the names given like a date stone underneath the skin. They had to them show considerable forethought. Thus three forms of stone, stone in the bladder, stone fever was called *asakku*, a word which means the in the kidney and stone in the liver. There is "burning disease" - while the plague bore the name no trace of any disease which can be identified as of "nerra" "the trampster". One of the most interesting description of these infectious diseases

In a letter of the time of Assurbanipal we is found in one of the plague legends tablets, in find that a man excuses himself from appearing which the expression occurs "the plague god is before the king on the ground that he is suffering resting upon the body of slave and chieftain"... from a bodily disorder of the body.

And the fever god is described as "he who traverses

He also read of boils and ulcers; several streets and goes from house to house" - a most diseases of women, for example, sterility, one or graphic description of infection. Of the disease prayers being recorded to avoid that and process common in Babylonia there are numerous lists, leprosy. It is still very common in Eastern among which may be mentioned "indigestion in countries among the Arab women, largely caused by various forms", jaundice or yellowness of the body, their never lying up at all during their confinement stone in the bladder, a most prevalent complaint

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Cancer of the breast is very common, said to be due to carrying heavy weights. The Arabs call it "the scorpion of the breast" from the peculiar stinging pains of cancer - a peculiar crab-like feeling.

Foot Note.

The scorpion in connection with disease amongst the Arabs is common. Whenever they have a slight burning pain like the pain of cancer, or the pain of a very burning ulcer, they speak of it as a scorpion.

Having enumerated the various diseases, we may now devote a little attention to the cures suggested, and the schools of medicine from which they emanated.

In the Akkadian schools diseases were treated as a species of possession, and the methods were sorcery and magic. Others employed the use of charms which set beneficent spirits in opposition to evil ones. In these there is little trace of the medical element, although the medical men acquired a certain amount of drug knowledge which they used in their treatment of patients and of which important records have been left.

In these we do not get much except the use of various kinds of grubs, and worms especially. Probably they were used because of the cooling effect of the worm. They smashed it up and made a kind of paste of it and applied it to the sore.



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Another thing used freely was the fly. These were smashed up also. In connection with Baalzebub, the sun god and the healer, the flies were healers of no little value among the Akkadians and largely used in their prescriptions. One prescription directs the use of several kinds of flies. They mixed them with butter and placed them on the eyes for ophthalmia. This recalls to mind that such a preparation was used by the great Sir William Temple even, who recommended as good for the quinzies a mixture of millipedes, honey and butter. One thing used very largely in all cases of scrofula and skin disease was fuller's earth. Their word for that substance was exactly the same as the Arabic, and the same substance is spoken of in the Bible. They used also very largely for all kinds of superficial disease milk taken warm from the udder animal, and among the things in which medicines were taken were milk and palm wine - wine from the date palm, a sugary kind of liquid. That was used largely with bitter herbs just as we use sherry and bitters to produce appetite. Another remedy which survives to the present day was warm milk and garlic taken for sleeplessness, and many travellers who have been in that country say that a clove of garlic boiled in milk is an excellent cure for some forms of sleeplessness. Onions were used largely in Egypt and Akkadia for this purpose. An old Dragoon, 70 years of age,

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used to visit the British Museum. He could walk 20 miles a day, and ate every night a clove of garlic before he went to bed to make him sleep. Without this he described himself as "a terribly bad sleeper".

How did the question of animal medicines arise in Babylonia? No doubt it was very largely due to totemism. Totemism in Babylon had two very curious sides to it; first Akkadian totemism which may be called the evil totemism; the other was the semitic or tribal, the good system of totemism. This exists among the Arabs, and therefore we find that we get that in the penitential psalms and tablets of that kind, for disease is a punishment of the gods, and he always bases his excuses in one or more of these forms --

1. "The sin that I committed I knew not of,"
2. "The evil thing that I did I knew not of,"
3. "Another which is very remarkable 'The forbidden thing that I eat I knew not of,'"
4. "The forbidden thing that I have trodden upon I knew not of".

Certain things no doubt were forbidden to certain tribes, just as we find that a people like the Assyrians looked down upon people like the Babylonians because they ate fish. Fish was forbidden to them. In the same way beef was forbidden to them. The god of the evening dawn where the dead were supposed to go, and the god of the morning dawn where the living were supposed to arise from.



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Babylon or Assyria in which beef was mentioned as an article of diet. If they offered one ox to the gods, they would offer 10 sheep. Cows were seldom eaten, and, secondly, were seldom offered, because in Babylon they ate the things that were offered to the gods. This, no doubt, is the reason why Daniel and the Jews that were with him would not eat the meat brought to them, because it had come from the king's table which was furnished with meats that had been offered in the temple. There were some curious things eaten, such as the wild ass. It is eaten at the present day in Persia. The goat, the ox and the gazelle were offered in sacrifice, the gazelle especially to the goddess Istar on account of the beauty of its eye. Istar was called the goddess of the beautiful eyes. The Arabs also offered the gazelle to the Arabic Venus for a similar reason. Some animals were specially connected with death. The lion for many reasons was thus connected. First of all, the god of death was called the lion god, the god Nergal. He was also called the trampler, the tearer, or the eater. This name forms an interesting explanation of Samson's riddle. "Out of the eater came forth meat". Then the dog was connected with death because he was the god of the two dawns; the god of the evening dawn where the four or five deities are mentioned in the dead were supposed to go, and the god of the morning dawn, where they were supposed to arise from.

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Medicine was not a part of religion, but the And the god Marduch was the god who brought the religious ideas of the two schools were totally dead to life. He had four dogs who stood, two on different, and it led to two different systems of each side of him, two for the morning and two for teaching. The Akkadians essentially believed in the evening dawn. Then the jackal was the god of driving away disease out of the body. The Semite death in Babylon as he was in Egypt - Anubis being the Babylonians believed in purifying the body the god of the grave-land. The serpent was the generally by external treatment, such as baths or god of death just as it was the god of life also. Medicines which practical experience had taught He was the god of death and was called in one of them were beneficial, and there is some probability the lexicographical tablets the 'offspring of the of practical value in what the Sumerian-Babylonians tomb'. That is explained in this way. Every did then in what the early Sumerians did. They night when the sun dies the serpent of night were great believers in evil, both externally and creeps on the heel of the setting sun and kills internally applied. The skin of a warm animal him, just as in the morning the sun kills the serpent by crushing its head. A natural explanation back is ~~xxxxxx acute rheumatism or catarrhs~~ is thus afforded to that passage in Genesis 'Thou

shalt bruise his head, and he shall bruise thy heel'. The German Oriental Society's translations heel'. Another very interesting introduction, a paper to be published about 1870 on Arch. meso- which probably came from Median sources into Assyria, if not into Babylon as well, was the horse as the god of death, and the last of the mythological animals. The horses of death are met with

Note 1.

(Look up the Babylonian Oriental records. One of the earlier numbers, perhaps the first volume. There is a paper on the god of death in Persian. About the four-eyed ~~xxxxxx~~ dogs of Avesta. This is a very suggestive paper in other directions as well).

Note 2.

Four or five medical tablets are mentioned in the catalogue which may be worth copying.



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Medicine was not a part of religion, but the religious ideas of the two schools were totally different, and it led to two different systems of teaching. The Akkadians essentially believed in driving away disease out of the body. The Semitic Babylonians believed in purifying the body generally by external treatment, such as baths or medicines which practical experience had taught them were beneficial, and there is more probability of practical value in what the Semitic Babylonians did than in what the early Chaldeans did. They were great believers in oil, both externally and internally applied. The skin of a warm animal used to be taken and wrapped round the chest or back in ~~xxxxxx~~ acute rheumatism or catarrhs.

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Note.           The German Oriental Society's transactions  
a paper ~~ta~~ ~~vv~~ published about 1870 on Arab medicine in Yemen by Dr. Geisler.

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30.9.10.



## REFERENCES TO DOCTORS IN THE ASSYRIAN LETTERS.

The tablet No. 572 states that on the 16th day of the month Nisan the ceremony of taking the oath, probably to Assurbanipal on his accession, was held in the palace, and the various officials passed before the King. First came the scribes, dupsar, in their various classes, according to order of precedence; then the seers, bari, the magicians and the physicians. That physicians resided in the palace is certain, and that they were sent by the King to the sick or wounded in whom he was interested, is proved by the well-known letter of Kudurri (K. 81), where the writer to the King says:- "For I was dead, and the King my lord has caused me to live." Ikisa, the physician (asu), whom the King sent to save my life has kept me alive." He then expresses his great desire to thank the King in person. He says, "The favours of the King my lord towards me have been many. To see the King my lord I write saying, I will go and will behold the countenance of the King my lord. I will go down and live."

Fortunate  
days.

The work of the physician in Babylonia was but little removed from that of the magician, and they had to observe favourable days for their treatment of the sick. Now a certain sinister character was associated with the number Seven. The 7th, 14th, 21st, 28th and the 19th days were evil days. The last of these because it was forty-nine days from the 1st of the previous month, which was also published by Dr. Fraulson.

In the ritual calendars, of which the British Museum possesses many examples, the rules for these days are given always in the same terms. 7th day "an evil day." "The shepherd of many nations is not to eat meat roasted by the fire, or any food prepared by the fire. The clothes of his body he shall not change, or white robes put on. Sacrifices he is not to bring, nor is the King to ride in his chariot. He is not to hold a court, nor is the priest to cast an oracle for him in the secret



2.

place. The physician must not administer medicine to the sickness of his body. "The day is not suitable for invoking curses on one's foes. At night, after sunset, the King in the presence of Marduk and Istar may bring his gift. Then he is to offer sacrifices, so that his prayer may be acceptable." The day is ended with sunset.

Diet.

The Babylonian physicians appear to have had some rudimentary knowledge of the laws of diet. On certain days certain foods were prohibited. On the 9th day of the 2nd month 'fish' is not to be eaten, as sickness will follow. 'Pork' is forbidden on the 30th day of the 5th month, as it will, if eaten, "produce diseases of the joints." On the 25th day of the 7th month, beef as well as pork is prohibited, while on the 27th day of the 6th month, 'dates' are forbidden as a precaution against "diseases of the eyes."

It is evident that the Babylonian must have been in a constant dread of having undertaken some act on an unlucky day, and the consultation of the omen calendar must have been an important part of the duties of a Babylonian doctor. The rules and regulations which governed his practice must have been very harrassing, and we may have had some of them in the medical treatise entitled "When thou enterest into the house of thy patient,"<sup>only</sup> of which two or three fragments remain, and these do not admit of any concurrent rendering.

The connection between magic and medicine is brought out by a remarkable series of omen tablets belonging to the reign of Esarhaddon (BC. 681-668) in the British Museum, which have been published by Dr. Knudtzon, where we find two references to sickness.

In one we are told:- "The King is sick, and it is ordained that he recover." Another is more explicit, "Nika, the mother of Esarhaddon King of Assyria, is sick. She sees the hand of the goddess Nana of Erech laid heavily upon her. Is it ordained that this hand be lifted off the sufferer?"

3.

It is evident that until we obtain more of the medical tablets, which certainly did exist, it will be impossible to form any true opinion as to the knowledge and methods of the Babylonian scribes and doctors.

According to Ctesias, himself a medical man at the court of Artaxerxes, the Babylonian doctors wore long blue robes, and were, like the priests and scribes, closely shaved. They also carried in their hands short metal rods with which they touched their patients, and similar staffs were carried by the Persian physicians. In the British Museum is a list of staffs of office, "the staff of the patesi, the staff of the vizier, the staff of the scribe, the staff of the judge, and the staff of the physician." No doubt there were species of divining rods.