LEPROSY

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THE CHINESE,

THEIR PRESENT AND FUTURE: MEDICAL, POLITICAL, AND SOCIAL.

BY

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PHILADELPHIA AND LONDON: F. A. DAVIS, PUBLISHER, 1891.

CHAPTER IX.

LEPROSY.

LEPROSY cannot be as contagious or infectious as a great many alarmists; in and outside the medical profession in the United States, would have us believe; for if so, the people of China would have disappeared from the face of the earth, from leprosy, long ago. My reason for this statement lies in the fact, that although there is leprosy existing in every province of the empire and every city of size, yet, in spite of the fact that the leper is under no quarantine regulation of any kind, leprosy has not spread to any appreciable degree in the last century. If leprosy is actively contagious, would not the leper, handling money, farm-implements, and even foodproducts, be a centre for the distribution of the disease? In other countries, where cleanliness is more universal, a leper would not have the same opportunity of infecting others; but in China, where the money is so filthy and so much handled, to say nothing of any other means of communication of the disease, if it were of the highly infectious type, the disease would soon be general.

One of the first references to leprosy in Chinese history occurs in "Pei Wen Yun Fu," where Yu Rang painted his body with varnish, to impersonate a leper,---removing his beard and eye-brows, with the intention of so disguising himself that he might assassinate the Dupe of Ts'ao, murderer of his master, Duke Tsin.

Dr. Edkins, of Peking, has studied the old Chinese histories in regard to the existence of leprosy in early times, and I quote from a recent article of his. In the

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calendar of seasons ("Yueh Ling") contained in the "Li Chi" it is said, "If in the middle month of winter the proceedings of government proper to spring were observed, locusts would appear and work harm, springs would all become dry, and many people would suffer from itch and leprosy." This calendar contains no small amount of superstition on the subject of luck. It says that if the proceedings of government are not regulated by the calendar all sorts of physical evils will ensue. These evils are stated, month by month. Such was the state of Chinese opinion when it was written, but when was that ? The month meant was December, for it is said that the shortest day of the year occurred in the same month. The writer regarded this class of diseases as abounding specially at that time.

This calendar is also found in the `Ch'un T'sieu' of Lu Pu Wei, whose work dates from the third century before Christ. But the commission of learned men who wrote for La Pu Wei used Chow phraseology and Chow documents, as is seen in the way they speak of the feudal barons, who must

have been still in existence. We may regard this calendar as very much a Chow-dynasty production. It recognizes the emperors of antiquity. It speaks of the empire as consisting of nine provinces. Further, this ancient fragment gives the place of the meridian stars at an interval of fifteen degrees in advance of the point where they are stated to have been observed by the ancient astronomers. For instance, in the 'Shu Ching,' Hsu (a star in Aquarius) is said to have been the meridian star at evening twilight in September. In the 'Yueh Ling' it is the meridian star at evening twilight in October. But the stars move at the rate of fifty seconds in a year, or a degree in seventy-two years. They move,

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therefore, fifteen degrees in ten hundred and eighty years, and this position of the star Hsu in October agrees, therefore, with the age of the commencement of the Chow dynasty, or about B.C. 1100. Consequently, this testimony in retard to leprosy may possibly go back as far as the time of Chow Dung (B.C. 1100). Yet, while the astronomy is that of this date, the book, as a whole, is more likely to belong to an age some centuries later, because the 'five emperors' are mentioned as being worshiped, and the mythology has the appearance of being that of abort the ninth century before Christ. We may then, at least, say that leprosy was probably known in China in the age of the later classics, two or three centuries before Confucius, and was dreaded as a calamity sent to punish moral evil.

- "In the Shih Chi history there is a case of a prince, named Siang, who received the title of Marquis Yi. He became a leper and had to go home, after resigning his command. This was about B.C. 150. He lived as a leper about twenty-three years. This took place in Shantung, in T'sao Chow Fu.
- "In the old history of the Pang dynasty it is said that a woman of T'sao Chow, in Shantung, professed to have communications with demons and with nature, and to be able to cure diseases through these communications. Many lepers came to her for cure, and were healed.
- "In the time of Confucius one of his own pupils (Pe Nieu) was a leper, and died of this disease. He is mentioned in the `Lun Yu.' This incident belongs to Shantung,---in the fifth century before Christ.
- " Coming down to the fourth and fifth centuries after Christ, we find traces of leprosy in South China and in

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Cambodia. In the country near Soochow a somewhat conspicuous character, named Chow Hing Si, became a leper. In his case white swellings appeared first on his hands. The Chinese divide tumors into white and red. The red are those of the light element, Yang; the white are those of the dark element, Yin. This would naturally be white leprosy. After this, continues the account, he contracted leprosy, and his left eye was soon gone. The Emperor touched his hand and sighed, saying, in the words of Confucius, 'Such a man, and to have such a disease!' The Emperor, then, with his own hand, wrote a prescription for white tumor, and gave it to him.

"'In Cambodia' it is said that 'many lepers are found. The people do not avoid them or refuse to eat with them, or even to sleep with them. The reason of this is said to be that the ruler of the country, in

one instance, was a leper, and the people ceased, on this account, to feel dislike to it.' This is taken from a book on Cambodia, written at a time when the Chinese Empire usually embraced that country.

"The Taoists professed to be able to cure leprosy by charms. In the catalogue of the Sui-dynasty library there is the name of a volume on the cure of leprosy by a charm said to have been found in the cave of Lao Chiun. This was in the sixth century.

"Leprous baldness is mentioned in the Liao history. In Eastern Thibet, adjoining the province of Kan Su, there was formerly a great love of revenging injuries. When there was a time of mourning it was not right to strike any one. People wore a coat of mail, having a border as a sign. When enemies were reconciled, the blood of fowls, clogs, and pigs was mixed with wine.

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This compound was stored in a skull, for drinking at the time of taking an oath. The oath was administered with the words, 'If you should again revenge yourself on such a person, may your grain be unproductive, may your sons and daughters be bald with leprosy, your cattle die, and serpents enter your tent.'

"In the 'Shen i Chiang' (Book of Marvels), of about the fifth century, a cure for leprosy is mentioned: `The shoots of the weeping bamboo ("tichu"), if eaten, will cure of ulcers and leprosy.'

"In the sixth century there is a story of a city magistrate whose court-house was burnt down with his dwelling. He took refuge in a monastery, and an ox and some wine were brought by the inhabitants of the city as presents. The magistrate ordered the ox to be tied to the pillar in front of the monastery. He then caused a dais to be prepared, and sat in his official robes in the hall to receive guests. The ox, loosening the rope with which he was tied, came across to where the magistrate was sitting, and made a bow. The magistrate laughed loudly, and at once ordered his attendants to slaughter the animal. After a hearty meal and deep potations, he lay down under the eaves to take rest. After a time he woke up with frightful sensations of itching; scratching was useless, for he had become a leper."

In the south of China, in the neighborhood of Canton, there are reported to be leper villages where those afflicted with the disease very badly are compelled to go and remain. In the North there are no such villages. The leper is privileged to go and come as he pleases, and the disease, while looked upon by the people as contagious, in some mysterious way, yet is not so powerfully so as to demand the segregation of the leper class.

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In every city of any size, and many of the villages, lepers are to be seen moving about among the healthy, buying, selling, and in no way deprived of the freedom accorded the unafflicted. The disease is called the "Ta Ma Feng," which means the great benumbing disease. I have treated thirty-five cases of variable severity, from the mildest, in which the eyebrows were just falling out and sensation deficient in the forearm of one hand, to those in which ridges of copper-colored hypertrophic elevations of skin covered the face, and loss of joints, with contractions of the tendons, had occurred.

In nearly every case the parents or uncles, aunts or grandparents had, some one or more, died of the disease. The youngest patient was eighteen, the oldest forty-five, and all were men. The fact of the disease, as seen by me, having been exclusively among the male sex is explained somewhat by the knowledge that, owing to the seclusion of women in China, the great majority of my patients have been men. But, in a dispensary practice of over thirty-five thousand patients during six years, at least 10 per cent. were women; and, so far, I have not seen a case among the female sex. Dr. Cantlie, of Hong Kong, in a report of one hundred and twenty-five cases of leprosy, had as many as thirteen female patients, or a little over 10 per cent. Other observers in China also note the preponderance of male subjects having the disease. The native physicians recognize its incurable nature, and usually decline to treat it. At the present time, when the disease is much discussed and little understood, any light which can be thrown on the subject should not be withheld. The profession in China are meeting with the disease every day, but so far little has been written by them upon the subject. What has

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appeared has been in the form of notes, in the reports of hospitals and dispensaries, and, so far as I know, no attention has been given to expressions of opinion as to the etiology of the disease. I believe, from what I have seen, that the disease is hereditary in most cases; that it is feebly contagious; that it is inoculable. Many of my patients with leprosy have acknowledged having had syphilis, and I believe that the previous saturation of the body with syphilis affords a favorable soil for the development of the disease.

I recently heard a lecture by Dr. Formad, of Philadelphia, before the Montgomery County Medical Society of Pennsylvania, in which he stated that a bacillus, of any kind whatsoever, required a certain soil for its development and growth, one bind requiring one soil, another a different quality of soil. Given a proper soil, and the bacillus is introduced, the specific disease would be certain to follow. Introduce it upon a barren or uncongenial soil, and the death of the bacillus would follow. This proposition seems undeniable, reasoning from analogy. If it is so, the syphilitic body seems a very favorable soil for the growth of the bacillus of leprosy. The Hawaiian Islanders were a strong, hardy race, apparently, up to the time the whalers from the Pacific infected the people with syphilis, which spread until it is reported they were about all syphilized; then leprosy tools hold, and to-day the settlement of Molokai, the largest leper settlement in the world, is the result. Quite a number of the cases of leprosy I have read about as occurring in the islands of the Indian Sea, Singapore, and Hong Kong, among foreigners, have been in individuals living immoral lives, and who supposed they contracted it from intercourse with Chinese,

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Malay, or Eurasian prostitutes. Such individuals were, doubtless, previously syphilitic. I do not want to be understood as saying all lepers are syphilitic. My position is that a syphilitic person is more apt to become leprous upon exposure to contagion for a length of time than an otherwise healthy individual would be. The period of incubation of the disease is placed by various authorities to be from three to twenty years. I believe in heredity, and that the disease may skip one generation and appear in the next. Two of my patients stated that their grandfathers had succumbed to the disease, but their parents had never had it; consequently, I believe that the incubation may extend through a life-

time.

Some authorities say that there may be such a thing as a hereditary predisposition transmitted without the transmission of the actual disease. I prefer to believe in the actual transmission of the disease, as it is more probable, and not so far-fetched an idea. That it is feebly contagious there seems no reason to doubt. Father Damien perished after nine years of continuous contact with lepers. Doubtless, daring the ulcerative stage it is more contagious than at other times, owing to the discharge of morbid material directly into the atmosphere. Washer-women of lepers would be more exposed at such times than when the disease was confined to anaesthetic affection of the slain. The question of how the disease originated in any given case is always uncertain if heredity does not account for it, and it cannot account for all the cases. One case came to my knowledge where a nephew wore his uncle's hat after the latter's death from leprosy, and within two years himself became leprous. If this case was caused by wearing the hat, the incubation was of two years' dura-

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tion; but, as he was of the same blood, the disease was more likely to have developed independently of wearing the uncle's hat. A hat-band, however, would likely be an active agent in producing infection. It receives directly the secretions of the skin upon an absorbent surface, and, upon drying, retains them; remoistened with perspiration and the friction, more or less constant, in wearing the hat, the secretion is rubbed into the skin, and actual inoculation is accomplished. As to varieties, I believe in only one variety. Other diseases are often mistaken for it, causing confusion in diagnosis; but leprosy is similar to syphilis,-there is only one variety.

True it is, however, like syphilis it may present very different manifestations in the course of years in the same subject, and in different subjects may appear very dissimilar. In some cases it runs its course in two years, but, in many, a fatal termination does not take place until more than a decade after the initial symptoms. All observers agree that, under good hygienic surroundings and proper treatment, the course of the disease may be greatly retarded and even improvement take place. The treatment embraces both constitutional and local remedies.

The constitutional remedies which have undoubted value are the tonics, vegetable and mineral. Combinations of iron, quinine, and strychnia, syrup of the hypophosphites, cod-liver oil, and the mineral acids all have their advocates. My own experience leads me to prefer the syrup of the iodide of iron in most cases as a constitutional alterative tonic. Dr. Cantlie praises very highly the ointment of Unna. He says he has seen decided improvement take place in one week, and after a short course the patient loses symptoms of leprosy. This ointment is:---

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Rx Chrysarobin, . . 5 per cent. Salicylic acid,. . 2 Ichthyol, . 5

Where the ointment is used on the face, pyrogallol is used instead of chrysarobin, and the ointment is

weakened by adding lard, 88 per cent. When pyrogallol is used, dilute hydrochloric acid should be given in tendrop doses three times daily, to counteract the deleterious effect of the pyrogallol upon the blood. This treatment is asserted to prove rapidly ameliorative, but no claim that it is curative has been made.

In my own cases I have used an ointment of carbonate of zinc for the ulcerative process, with good results. In the worst cases I have used hydrarg, ammoniat, zinc oxid, and plumbi acet, made up into an ointment with cosmoline. I do not believe it necessary to place lepers in a special hospital when they can be well taken care of at home, and isolated to the extent of leaving a separate room, special dishes, and special washhouse. This is, however, as a rule, not convenient, and the leper is better off in a well-regulated hospital than in his home. I was five days the guest of a leper, on whose brother I operated for urinary calculus, and although he ate in another room he was frequently in my room, and even sat beside me on the same bench. If I believed the disease as virulently contagious as many (who have never seen a case), I should have been most unhappy at that time. I will give the notes on two typical cases that have come under my observation, and with them dismiss the subject:-----

CASE I. Wang Tei Sheng, aged 37, resides in Ch'i Hsia; farmer; father died of leprosy at the age or 45; mother died of fever last year; father's uncle died of

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leprosy many years ago; has two brothers younger than himself, both strong and well; has had no sisters; has heard that there is a leper in a village three miles away, but does not know him; no other leper in his own village; contracted syphilis at 21 years of age, married at 23, and has never had a living child; his wife, who is healthy, has had five miscarriages. Patient is 5 feet 8 inches tall and weighs 148 pounds; first noticed three years ago a numbness of the thumb of the left hand which in course of a few months extended to the elbow; six months later right hand became affected and eyebrows fell out; was treated by native physicians, but did not improve; a year ago right foot became anesthetic, and a few months ago an ulcer appeared under ball of right great toe, which still exists. On examination, found that the sensation of left forearm is totally abolished and shin is dry and scaly. Right forearm, on palmar surface, still retains sensation, though diminished; dorsal surface abolished. Sensation diminished in both legs, worse on right side. A round, perforating ulcer, size of a halfdollar, exists under ball of great toe of right foot, which exposes the joint and shows the bone denuded of periosteum; left foot intact. A small ulcer, caused, he says, by carrying burdens slung on a pole, exists over the left clavicle, but, as it is not sensitive, must be regarded as suspicious; no infiltration as in gummata, only a whitish, indolent-looking ulcer. Eyebrows have disappeared; copper-colored ridges from arch of orbits to the hair; malar prominences insensible, white, and deadish-looking; eyes move sluggishly, and have an expression of apathy, betokening a torpor of the thinking faculty; answers questions slowly., but lucidly; has never had headache nor pain; knows he has the "ta ma feng," and comes

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to get relief " so he can feel things;" does not expect a cure.

CASE II. Li Wen Ta, coolie, aged 26; resides in Chi Yang; father's brother died of the "ta ma feng;" father and mother both living and healthy; one brother died of leprosy two years ago, and patient fears he is going to die of the same disease; his brother was affected five years previous to his death, which was hastened by a beating received in a brawl; soon after his brother's death he noticed a numbness of right foot, which in a year's time became absolutely senseless; left foot is beginning the same way, though still retains sensibility; eyebrows have dropped out half-way across on each side, commencing from the nasal bone, giving him a curious expression; says he has never had syphilis, but acknowledges to have had promiscuous intercourse; is unmarried; no other marks on the face, but complains of a coldness between the shoulder-blades; tongue fairly clean and appetite good; bowels sluggish and skin dry. Case II is not as far developed as Case I, but is tending in the same direction.

The venereal diseases exist in China, as elsewhere in the world, as three principal affections,---gonorrhoea, chancroid, and syphilis. Gonorrheea is the same disgusting disease everywhere, but, owing to the carelessness of the Chinese as to cleanliness, is particularly obnoxious amongst them. Many times I have seen cases where the patient allowed the discharge to drop into his loose, baggy trousers until they were saturated, taking no precaution whatever to keep his clothes clean, and only changing them when they became too offensive to himself to longer endure it. Owing to the diet being largely vegetable, however, the disease seems, in a majority of

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cases, to run its acute course more rapidly, and to soon subside into a gleet, and often disappears, after a few days of suppuration, without any treatment. Many of the better classes even believe it may be a result of cold, and the wind is blamed for many a case of clap, which, of course, it had nothing to do with. Gonorrhoeal ophthalmia is a frequent accident, but orchitis and epididymitis are rarely seen, considering the frequency of the disease. When it exists among the upper classes, it is harder to cure, as they will not obey orders about diet, and indulge too largely in fatty foods and stimulants. Chancroids are more rare and chancres more common than in the United States. I remember, when attending the venereal clinics of the hospitals in America, that chancroid was much more common than the syphilitic initial lesion. In China the reverse is the case; at least, in my experience. I have seen ten chancres where I saw one chancroid. Syphilis is very little understood by the native physicians. Some of them recognize pustulous syphilis as due to impure intercourse, but the more obscure manifestations of it are never attributed to the proper cause. As it is greatly neglected, many cases of brain syphilis come under observation, as well as bone troubles and all the phenomena of the tertiary period. It yields very rapidly to treatment, even in the worst cases,---due, in my belief, to the vegetable diet of the mass of the people. People without noses are more common in China than in the United States. Nothing is done by government to stamp out the disease, and brothels are not under police or sanitary regulations, as in Japan. The Chinese use mercury in the treatment of syphilis, in the form of an impure calomel, given in large doses. This produces violent purging, which is supposed to clear

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out the disease. They bear iodides badly. Small doses have, in my hands, produced iodism several times, and other observers have noticed the same fact. I always go carefully in administration of the

iodides, and usually commence with three grains three times daily, and increase it as I find the patient will bear it. Ulcerations of syphilitic origin exist sometimes to frightful extent, but they heal up beautifully and rapidly under appropriate treatment.

The Chinese have been accused of being great practicers of sodomy, having institutions resembling brothels here it is carried on. I am glad to say I believe these rumors are mostly false. I learned on authority of my teacher, a Mr. Yang, that there was one large place in Tientsin where boys of from ten to sixteen years of age were used for immoral and disgusting purposes, and occasional cases that have come to the dispensary prove it is occasionally carried on. Put it is not a national vice, as it is in Korea, and the mention of it to an ordinary Chinaman fills him with disgust and horror. I merely mention this subject to refute the stigma some have placed upon the Chinese in this respect. As a whole, I doubt if the Chinese are in any respect more immoral than Americans or English, and, considering their light, they can well compare with many who boast of the social purity of their country. Adultery may even be punished with the death of the guilty parties, which in civilized countries is not possible. I saw a woman and her paramour led to execution down the principal street of Chinanfu, for adultery and the suspicion of having killed the woman's husband, and all around me the people kept saying, " A righteous verdict," They deserve to die," and other like comments expressive of their disgust at the crime and their satisfaction with the extreme penalty about to be administered.