

## THE INTRODUCTION OF VACCINATION INTO THE FAR EAST.

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IN view of the astonishing wealth of medical illustrative material coming down from the times of classical antiquity and the Middle Ages, it is a matter of surprise to find in this line a blank in the history of the Far East. It is true a large number of the medical books published in China are fairly well illustrated with woodcuts exhibiting the surface characteristics of pathological phenomena, particularly of skin-diseases, and we even hear of careful paintings (water colors) representing infantile eruptions apparently observed and noted down.<sup>1</sup> But there is no artistic element in these productions which even fail in their purpose to impart instruction, and Chinese art is entirely devoid of subjects derived from the activity of the medical profession.

No portrait of any famous physician—and there is a large number of those on record—has been handed down by the brush of an artist, nor are there any pictorial representations of physicians in their intercourse with patients. The sick-bed was not a recognized and approved sphere for the exercise of academic painting, and as portraiture has always been the weak point in Chinese art, because of the lack of individual power, we may safely say that Chinese painters would never have had the ability to portray a sick person in unmistakable distinction from a healthy individual. I have met several finely built and venerable looking Chinese physicians, and when observing them at their work I liked to imagine what fine pictures worthy of a great native artist they would make, if depicted in the act of feeling the pulse, the cornerstone of their practice, or while jotting down their prescriptions with mysterious dashes of the brush. In the catalogues of painters and paintings where all

<sup>1</sup> M. Courant, "Catalogue des livres chinois," *Bibl. nat.*, Vol. II, p. 123. Paris, 1903.

the standard subjects are carefully enumerated, the healing art is also conspicuous by its absence. I have inquired and searched in vain for medical pictures in China.

In Japan, conditions are in general about the same, though at least some exceptions seem to exist. W. Anderson<sup>2</sup> describes a medical roll (*yamai no sōshi*) from Japan as follows: "A series of representations of various morbid conditions, amongst which may be recognized carbuncle, bursal and other tumors, paralysis of the lower extremities, gangrene, acne rosacea, lycanthropy, eye diseases, abdominal dropsy, intestinal fistula, gastric fistula (a man whose mouth is obliterated is introducing food through an aperture in the region of the stomach), and elephantiasis. Descriptive text at end of roll which is 360 inches long." The original is said to be traceable to a painter of the twelfth century; this one was copied in 1780 by Imamura and recopied in 1788 by Kumashin. This picture, No. 276 of the collection in the British Museum, perhaps deserves the attention of students of the history of medicine.

The Japanese colorprint reproduced in our frontispiece is in the possession of the Field Museum, Chicago, and is of great interest in the history of civilization.

The subject of this print (26×37 cm.) is the introduction of vaccination into Japan, as is plainly shown by the explanatory labels added to the two principal figures. The devil on the right is designated as *jitsu-wa akuma bōsōshin*, "really the devil, the spirit of small-pox," and makes his escape from the new young genius riding on a cow's back and chasing him with a long spear. This one is interpreted as *seikoku Oranda gyūtō-ji*, "the youth of vaccination (lit. cow-pox), Holland being the country of his origin." He has three tufts of hair on his head and is clad like a Japanese boy. The small-pox devil is the well-known type of *oni*, only covered with a fur apron and gaiters, of red skin-color, and with animal claws on hands and feet. He wears a straw hat with rim turned up, from the center of which a top-knot and a pair of horns stick out. A paper *gohci* is stuck into the hair (see further below).

The artist who produced this print is Shuntei, his signature (*Shuntei-gwa*, "picture of Shuntei") and seal being placed in the left lower corner, and the print was published in the first month of spring, i. e., February (*mō-shun*) of the year 1850, the third year of the period *Kaie* with the cyclical sign *ka-no-e-inu* (on the margin of the right upper side).

<sup>2</sup> *Catalogue of a Collection of Japanese and Chinese Paintings in the British Museum*, p. 139. London, 1886.

According to E. F. Strange,<sup>3</sup> Shuntei, more fully Katsugawa Shuntei, was a pupil of Shunyei; he was an invalid and made but few prints most of which were issued by the publisher Murataya. He lived about 1800-20, and, in addition to book-illustration, produced broadsheets of interest and originality. Among them the most notable are legendary or historical scenes. These are executed with considerable dramatic force and are generally printed in a characteristic color scheme, of which grays, greens, and yellows are the prevailing tints. His color is more harmonious and delicate and his drawing finer when he is at his best, even than in the work of Toyokuni, while his dramatic power and intensity are as great. Early impressions by this artist, with the fine old colors, are by no means common; the later reprints are worthless from the collector's point of view.

Shuntei is said to have died in 1825 at the age of about forty. I have no means to verify this date; should it be correct, we are certainly compelled to admit that the print under consideration presents either a later reprint or a posthumous edition. Because of his poor health Shuntei produced but few works, all of which are now rare.

This cut is interesting from two points of view. It reveals the imaginative power of Eastern artists who even in modern times create new personifications relating to inventions and ideas introduced from abroad. The new method of vaccination leads to the conception of a powerful lucky genius, riding on a cow and driving out with the force of his spear the disease of small-pox. Thus a new deity sprang up shortly before 1850. But the artist did not strain his imagination by attempting to lay down a new type for his novel subject, though its foreign origin might have well tempted his efforts in that direction; he did not represent his new god after a Dutch fashion or in any other foreign style, but made him plainly a Japanese. He is one of that numerous class of joyful muscular lads bestowing bliss on mankind whom we meet so frequently in China in the retinue of Buddhist and Taoist saints and deities, and his costume corresponds to this notion. Even the fact that he is riding on a cow's back, though a most felicitous and cleverly chosen motive in connection with the idea of vaccination, is by no means a novelty: on the contrary, the figure of a boy astride a buffalo or ox occurs so frequently in painting or moulded in bronze or pottery that it is familiar to everybody in Japan and China. The small-pox devil is the typical Japanese *oni* or the Chinese *kuei*, so there is obviously

<sup>3</sup> *Japanese Illustration*, p. 38, London, 1899.

no trace of a foreign feature in the picture. The task set before the artist has been accomplished solely by the use of expedients drawn from the domain of native ideas. The old types sanctified and honored by tradition are utilized to express an imported idea; the old form is made to fit a new content. Indeed, if we had only the bare picture before us without the comment of the additional printed matter, we could easily realize that it represents a helpful good genius expelling a bad demon and ridding the country of his presence. It has occurred a hundred and a thousand times in history that new ideas, usually of a religious character, have been introduced from outside into another civilization, and that the native national types and styles already in existence have been chosen to lend them artistic expression. But not all of these cases are of such plain and authentic evidence as the present one, and its very recentness renders it the more valuable for an intelligent appreciation of the psychical basis of similar events.

A rather long inscription composed by Sōsai Setto is spread over the upper part of the print. It opens by relating that in former times only inoculation was known; that it commenced in China under the Emperor Jên-Tsung (1023-1063 A. D.) of the Sung dynasty and consisted chiefly in administering the virus into the nostrils;<sup>4</sup> that of the various methods of vaccination the latest and best was discovered in Holland by Edward Jenner in the Bunkwa period (1804-17). This error of the Japanese author is not surprising but indeed excusable, since in Japan knowledge of European countries was at that time limited, and acquaintance with Western medicine and science had heretofore been derived from Dutch teachers like Engelbert Kämpfer (1651-1716) who, though a German, was considered a Hollander by the Japanese, because he was in the service of the Dutch East India Company. The Japanese report on our picture goes on to describe briefly Jenner's discovery by transferring cow-pox to a baby's arm, whereupon all the people of Holland were

<sup>4</sup>There were two chief methods of inoculation in vogue in China, the wet and the dry methods; in the former a piece of cotton impregnated with the virus was inserted in the nose; the latter mode was to dry the crusts, reduce them to powder, and to blow this powder up the nose. Yet another way was to dress the child with clothes that had been worn by some one afflicted with small-pox. The date of the beginnings of inoculation is not yet satisfactorily ascertained. A. Wylie (*Notes on Chinese Literature*, p. 103) remarks that small-pox has engaged the attention of the Chinese from near the commencement of the Christian era, and that inoculation has been practised among them for a thousand years or more. But the only evidence produced is a treatise on the disease published in 1323 and reprinted in 1542. Dr. Lockhart, the father of medical missions in China, is quoted as saying (*Medical Missions in China*, p. 226) that inoculation was introduced in 1014, which is practically the same as the above Japanese statement.

operated on, and the new method was then introduced into China, where it was compared with the old methods. "When the physicians and people of China found that there was no better way than the new method of vaccination, they had all reasons for it expounded in a book which was distributed throughout China and then sent to Japan. Afterwards, all nations adopted this method, and the old fashions were abolished."

There is an Uta appended by Fukakawa Mannin, reading:

*"Hōsō no kami to wa tare-ka nazuke-ken,  
Akuma gedō no tatarī nasu mono."*

"Whatever the Spirit of Small-pox may be called,  
He is a devil, the curse of heretic teaching."

According to Aston (*Shinto*, p. 194, London, 1905), small-pox is a *kijin biō*, or demon-sent disease. The color red is freely employed in combating it. The candles at the bedside are red, and the clothing of the patient and nurse. The god of small-pox is worshiped with offerings of red *gohci* (there is here some confusion of ideas) and of red *adzuki* beans. Red paper is hung around the necks of the bottles of *sake* offered to him. Red *papier maché* figures of Daruma are placed near the sick-bed.

We have observed that the demon of small-pox on our print is colored red and wears a *gohci* on his head. In Chinese medicine, all diseases are connected with the principles of heat and cold, and small-pox is caused by the heat principle, which may account for the employment of the red color.

According to B. H. Chamberlain,<sup>5</sup> vaccination was officially adopted in Japan in 1873 as the outcome of the efforts of Sir Harry Parkes, with the result that whereas the percentage of pox-pitted persons was enormous only a quarter of a century ago, such disfigurement is now scarcely more common than at home. Nevertheless, a Pock-mark Society is believed to be still in existence, though its ranks have been sadly thinned by vaccination.<sup>6</sup>

Vaccination was first introduced to the notice of the Chinese by Dr. Pearson<sup>7</sup> at Canton, who wrote a tract on the subject; this was afterwards translated into Chinese by Sir G. Staunton and published

<sup>5</sup> *Things Japanese*, pp. 212, 319, 3d ed., London, 1898.

<sup>6</sup> *Ibid.*, p. 373. F. v. Wenckstern (*A Bibliography of the Japanese Empire*, p. 142, London, 1895) quotes a notice under the title "Vaccination and Small-pox in Japan" (*Indian Medical Record*, Vol. III, p. 128, Calcutta, 1892) which is not accessible to me.

<sup>7</sup> Formerly at the head of a vaccination institute in London founded in 1799 by the advocates of Jenner's theory; then in the service of the East India Company in China.

in 1805 with the title *T'ai-si chung tou k'i fa*, "The European Method of Vaccination (lit. Inoculation)."<sup>8</sup> With some modifications, the same pamphlet was published shortly afterwards by the missionary Wilhelm Lobscheid in Hongkong (*Ying-ki-li kuo sin ch'u chung tou k'i shu*, "Treatise on the Method of Vaccination, as newly invented in England").<sup>9</sup>

I have never had occasion to look into this treatise myself, but know its contents merely from the brief analysis given by J. v. Klaproth.<sup>10</sup> According to his statement it consists of seven leaves of large octavo size, and the back of the title-page is adorned with the colored illustration of a cow-pock, an arm on which is indicated the spot to be inoculated, the lancet and the small ivory spatula for holding the lymph. The interesting historical fact may be gleaned from this tract that Staunton after describing Jenner's discovery and its marvelous effects goes on to narrate that the new treatment rapidly spreading throughout Europe, Asia and America, had also reached Manila, where it gained such a high reputation that the Spanish governor spared no money but fitted up a ship in which to send small children to China for the propagation of this pock-matter. In this way it came to Macao in 1805, where the best results were shown.

Dr. Pearson carried on the work of vaccination among the Chinese with great vigor and perseverance, and the new practice soon sprang into favor among them, for, though very conservative in their habits and judgments, they take to a new method quite readily when once thoroughly convinced of its benefit. In the course of the winter and spring months of 1805-6, there was an epidemic of small-pox, and thousands were vaccinated. Even many Chinese who had been instructed by Dr. Pearson practised it extensively, not only under his immediate inspection but in distant places as well. Later on, there was certainly occasional opposition on the part of native physicians and the Buddhist priesthood who had derived a certain income from practising inoculation and from the people's offerings to the small-pox deities in times of visitation of this plague. But despite such local prejudices as occurred also in our countries, the Chinese soon recognized the benefit of vaccination which is now almost universally practised by them. In the country they vaccinate from child to child, or from arm to arm, without procuring fresh

<sup>8</sup> A. Wylie, *Notes on Chinese Literature*, 2d ed., p. 103, Shanghai, 1901.

<sup>9</sup> *Memorials of Protestant Missionaries to the Chinese*, p. 186, Shanghai, 1867.

<sup>10</sup> *Archiv für asiatische Litteratur, Geschichte und Sprache*, Vol. I, pp. 111-113, St. Petersburg, 1810.

cow-lymph.<sup>11</sup> Their long continued practice of inoculation had doubtless prepared them for the reception of the new remedy which indeed has nowhere met with an open hostility or demonstration, another instance of their tolerance and liberal spirit. When inoculation was introduced into England from Turkey in 1718 by Lady Montague and was first tried on condemned criminals in 1721, the divines were indignant at such interference with Providence. Taking Job's boils for his text, Edward Massey, lecturer of St. Albans, is said to have preached the following words at St. Andrews, Holborn, in 1722:

"I shall not scruple to call that a diabolical operation which usurps an authority founded neither in the laws of nature or religion, which tends in this case to anticipate and banish Providence out of the world, and promote the increase of vice and immorality." How much more enlightened and grateful was the attitude of the Chinese and Japanese towards the adoption of vaccination!

<sup>11</sup> For a full history of the subject in China see J. Dyer Ball, *Things Chinese*, pp. 750-761, 4th ed., Honkong, 1903.