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CREMATION OF CHOLERA CORPSES.

BY ALBERT S. ASHMEAD, M.D., LATE FOREIGN MEDICAL DIRECTOR OF TOKIO HOSPITAL, TOKIO, JAPAN.

JAPAN has almost everything, or believes that it has almost everything, to learn from us; but there are a few things which it would be wise for us to consent to learn from Japan. The Japanese, a prey from time to time, like all Oriental countries, to cholera epidemics, and, having the cholera always with them endemically, have early found out that the cholera corpses should be burned.

There are in the city of Tokio six crematories. They are not only destined to the incineration of cholera corpses; for cremation is imposed as a religious duty by a number of Buddhist sects. In the oldest cemetery in Japan, that of Koya-san, near the great water-falls in Wakayama-Ken, 700 English miles south of Tokio, cremation has been practised, as is generally believed, as a religious rite these 1200 years.

Naturally, the rite of incineration had no difficulty in that country in passing from the religious conception to a sanitary application. The first sanitary cremation edict was issued by the government in 1718, during an epidemic which seems to have been very destructive. Japanese documents speak of that period with trembling awe; 80,000 a month died in the city of Yedo; undertakers could not make coffins fast enough; grave-yards were all filled up. The Japanese are singularly struck by the idea that the men who worked at the cremation furnaces after sunset were themselves changed into smoke before sunrise, and that the tomb stone cutters of a day found (*horribile visu!*) their own names carved on the morrow's tombstones! Finally the priests of all the sects united in asking for a general application of the cremation rite; ashes alone, they said, should be buried; at every burial-ground mountains of casks discouraged the diligence of the grave-digger; a multitude of corpses (the Japanese documents have the simplicity to add that they were mostly poor persons) remained unburied for weeks. The Japanese have long believed that this was a cholera epidemic, the first that ravaged the *fertile sweet-flag plain;* but that is a delusion. Cholera paid them its first visit more than a hundred years later. It was then that the religious character departed once for all from the cremation rite; for the government, seeing that the fire was too slow, ordered the bodies, wrapt in mats and quick-lime, to be sunk into the sea; cremation ever after was only a sanitary operation.

In the past thirteen years there have been 456,080 reported cholera patients in the empire; of these 303,466 died, that is, 66½ per cent. Every one of these corpses has been burned. Under police regulations, in the city of Tokio, there may be eight public crematories (of course, this has nothing to do with the private establishment of each Buddhist burial-place), placed outside of the city-limits. The law requires that they shall be constructed of brick and large enough to burn at least twenty-five corpses at a time. Each furnace must have a chimney over thirty feet high. Each crematory is expected to have a separate furnace for burning discharges, and a separate disinfecting room. This furnace is to be of brick and capable of incinerating at least twenty-five casks (bushels) at a time; its chimney must be thirty feet high. The law requires further that the disinfecting compartment shall be divided into two spaces, one a bath-room, not for the corpses, of course, but for persons suspected of harboring the disease; the other a fumigating place. Cremation can only be performed from sunset to sunrise; the corpses are not stripped of their clothing, and are one and all accompanied by their burial certificate.

In the Buddhist cemeteries cremation is thus performed. The corpse is brought in a square wooden box or barrel (the regular Japanese coffin) in a sitting position, according to the national custom. A hole in the ground with sloping sides awaits it, at the bottom of which are two stones, upright and parallel; across the top of these stones fire-wood and charcoal are piled. Around the corpse, placed upon the pile, a circular wall is built up, formed of rice-straw and chaff, perhaps to a height of five or six feet, and the wall itself is wrapped in wet matting, which during the whole operation is continually moistened. The fire is kept up during twelve hours, after which the ashes and bones are picked up with chop-sticks by the oldest representative of the family, enclosed in a funeral urn, and buried after seven days of various religious observances.

It is most regrettable that cremation has not with us that religious origin which recommended it first to the Japanese. Reason and good sense have never proved such strong foundations; otherwise the advisability of the cremation of cholera corpses would have occurred to us long ago. It is useless to object that these precautions do not preserve Japan from cholera epidemics. The disease is kept up there by causes which cannot be reached by cremation. The houses are built in unhealthy places, they are squalid and in every way insalubrious; the water is wretched, infected by impurities dropping from ill-kept closets. There would be no end, if we tried to enumerate all the causes of disease, which render the wisest precautions useless. None of these causes exists in our western countries, and the cremation of cholera corpses would have yielded its whole sanitary benefit. If we burned our corpses, the bacillus would be destroyed effectively; in Japan, the dejections of the living, contaminating the well-water, the system of promiscuous public bathing, etc., keep it alive in spite of the cremation.

When the cholera, some years back, made its appearance, not in New York, indeed, but in its harbor,—that is, in the quarantine station,—having been brought by an Italian