

the suicidal propensity in India. Dr. Cornish informs us that the number of deaths by suicide in 1877 was 2,575, against a quinquennial average of 1,970 for 1872-76. In Lower Bengal, suicide is frequently attributed to abdominal distress, caused by colic, enlarged spleen, or worms. The condition is called *pet sool* or *sool bedna*, and there can be no doubt from the evidence adduced by Dr. Chevers and others, that this is a real and frequent cause of self-destruction.

Apart from physical influences, which affect the comfort and value of life, and cause bodily distress and pain, and there are religious and moral influences at work in India which predispose to suicide. The practice of *sumajh* or leper burial, which is not yet extinct in some parts of India, was really a species of suicide sanctioned by society and the priesthood; so was *suttee* or widow-burning, and various descriptions of torturing, mutilations and sacrifice under the influence of religious asceticism or enthusiasm fostered a general suicidal propensity which survives the practices themselves, now happily a matter of history.

The preponderance of female suicides is no doubt due to a survival of the *suttee* feeling, and to the social degradation of women in India. The slight provocations under which they commit self-destruction indicate a low moral tone. There is a curious class of suicides common in eastern nations, and more common now in China and Japan than in India, namely, suicides for revenge. The idea underlying these is that the responsibility for the destruction of life is laid upon the person furnishing the provocation to the act. Brahmins used, under this feeling, to mutilate and kill themselves, or members of their families; and this was so common a practice that Government was compelled to pass a special law to repress it.

The whole subject of suicide is one of singular interest, inasmuch as the act is opposed to the most powerful instinct we possess, namely the love of life, and the influences which tend to overpower this instinct in a community are deserving of very careful study. The instinct being a personal or individual one, and the motives leading to its conquest or suppression being also apparently personal or individual, the strange thing is that, in the mass, the number of instances of the act are so uniformly repeated. It is this fact, however, which renders the study of causes at once possible and attractive.

SUICIDE IN CHINA.

In the preceding article we have given a slight sketch of suicide in India. The practice is tolerably common, and more common among females than among males. Hanging, drowning and poisoning by opium and (occasionally) arsenic are the usual methods; and there

are traditional prejudices or feelings—the relics of former customs—among the people which tend to encourage the idea that there are circumstances in which self-murder is permissible, perhaps justifiable, or even laudable. It is interesting to compare the case of China with that of India. The Rev. Henry Gray, M. A., L.L. D., Archdeacon of Hongkong, has lately published a most interesting work “on China; a history of the laws, manners and customs of the people,” in which he devotes a chapter to the subject of suicide (Chap. XIII., p. 329). He states that the Chinese are more prone to commit suicide than any other people in the world. Though their religions forbid it, and hold out the prospects of dire penalties in the future for the self-murderer, still on very slight apparent provocation the Chinese put an end to their own life. No statistics are given, (probably none are available); but the practice must be very common to attract so prominently the notice of an outsider noting and reporting on the manners and customs of the country. The inherent proneness of this strange people to commit self-destruction was strongly developed during the construction of the Panama Railway. Captain Bedford Pym, R. N., states that a lot of Chinese workmen were employed on this undertaking. They, as well as others, suffered much from sickness, the tract crossed by the railway being very unhealthy. The Chinese coolies were found every morning suspended in half dozens to the boughs of trees. So much for the influences of congenital propensity, expatriation and ill health. The influence of expatriation in causing suicide is well illustrated by the statistics of the British Army. We have tabulated from the departmental blue-books the facts of the five years, 1869-73, and find that, while the rate of suicides in the home army is 271 per million, it is 385 in the army serving in the Colonies, and 577 in the army serving in India. The greater proneness of coloured races to commit suicide has been noticed by authors and alluded to by Surgeon-Major W. Curran, in an interesting paper published in this journal in November 1876. No doubt the element of race is a very important one in this matter; but we should hesitate to pronounce such a sweeping conclusion without more exact and positive evidence. The proportion of suicides in some European countries (Denmark and Saxony for example) is very high—quite as high we should think as anything in the East. The most common method of committing suicide in China is by opium, but both hanging and drowning are frequently resorted to. Violent methods (by gunshot or wound) are very rare.

There are two descriptions of suicide which may be designated as common and honourable. Common suicides are the outcome of destitution, dissipation, gambling, immorality, jealousy, anger, disappointment

and other similar social troubles which embitter life, and, if they excite any feeling at all among the community, it is a feeling of disapproval or contempt. But it is otherwise with "honourable suicides." These are the result of outraged or threatened virtue, insulted or tarnished honor, failure in politics or war, and they command the respect and admiration of the community. It is curious to find that Sutteeism is not infrequent among the Chinese. A young woman whose betrothed has died before marriage, wives and daughters who have lost their husbands or fathers, nay, husbands and fathers who have lost their wives and children, esteem it a virtue to follow them into the next world, and their conduct in putting an end to their own life under the circumstances is publicly applauded and held up as a pattern for imitation. So deliberately is the act of suicide committed in China that its perpetrators deck themselves out in grand clothes before they destroy themselves, believing that they will appear in the new life in the clothes in which they die. In any community where suicide is a custom tolerated or honoured, it is not strange to find the suicidal idea and its practical realization common. The only remedy appears to be to eradicate this idea, and this has been to some extent successfully attempted in India by discountenancing and suppressing the various kinds of justifiable or commendable self-murder which used to be resorted to.

Reviews.

A few remarks on the Theory and Practice of Drainage in the Hooghly District.

THE subject of village drainage in Lower Bengal is one of great sanitary importance. Rajah Degumber Mitter has during the last fifteen years, with great intelligence and commendable persistence, pressed its importance on the Government and public in relation to fever causation. His views have always commanded attention, and have latterly resulted in practical effort, as the evidence which he has so industriously collected demonstrating the evils caused by defective and obstructed drainage has grown in bulk and point. The latest indication of the influence of the Rajah's opinions and facts is the publication, in the *Calcutta Gazette* (of May 1878), of a Resolution, bearing date 29th April 1878, impressing upon Magistrates the importance of village drainage and of removing obstructions to drainage caused by artificial constructions—roads, railways, embankments, &c)—or by the natural silting up of channels which remove surplus water from the land. The digging of tanks for the purpose of supplying good water, and serving in very level tracts as auxiliaries to drainage, is also commended. The issue of this resolution appears to have been caused by a letter from Rajah Degumber Mitter submitting a copy of his well-known work ("Epidemic Fever in Bengal," reviewed by this journal in June 1872 and April 1877.) The anonymous pamphlet now under notice contains a good deal of sensible and practical information and advice on village drainage. The author possesses clear and correct views on the subject, and puts them down plainly and convincingly. His theory of the *modus operandi* of natural drainage

is the same as the Rajah's. He points out, as the Rajah has done, that the river bank is the highest point of the land level; that the slope is from the river towards the *jolah* or swamp in the interior; that the natural tend of surface water is in the same direction, and that the swamps are finally drained by *khals* which, entering the river lower down, convey the water into it. He shows, however, that the slope of the land towards the *jolah* is very gentle, and that the level of the *jolah* is considerably higher than that of the river, except for short occasional periods and under temporary circumstances. He advocates the construction of artificial drains into the river rather than the *jolah* in most cases on account of the shorter distance and better fall obtainable. In this we are inclined to agree with him. He distinguishes between a drainage slope and a drainage channel, and demonstrates the great advantage of getting the water into channels as soon as possible, otherwise stagnation and saturation are inevitable even with a considerable drainage slope. The advantage of petty cuts from the interiors of houses, gardens and flat lands, to ditches and main drains is forcibly indicated. Many shrewd practical hints are given regarding the construction of drains and the detection and treatment of obstructions. The brochure appears to us to be intelligible and sound, and on sanitary grounds we strongly commend its object, and we hope that it may prove of use to those who recognise the importance of village drainage and endeavour to improve it.

On Cobra Poison. By ALEXANDER PEDLER, F. C. S., *Professor of Chemistry in the Presidency College, Calcutta.*

THIS is a reprint from the proceedings of the Royal Society. Professor Pedler finding that the addition of hydrochloric acid weakened the effect of cobra poison, tried a number of chemicals into whose composition chlorine enters, and at last found that the addition of a solution of platinum tetrachloride to the poison some time before injection causes chemical changes in it which to a great extent abolish its virulence. A yellow amorphous precipitate is formed, and neither the precipitate nor liquid appear to be very poisonous. When the material was injected immediately after mixing, the antidotal effect of the mixture was not so apparent, and experiments made with a view of indicating the antidotal power of the platinum salt in the living tissues were a failure.

The utmost that Professor Pedler claims is that he has discovered a "chemical antidote" to the venom. He has certainly given grounds for believing that the platinum salt when mixed with cobra poison in a test glass, causes chemical changes which reduce or obliterate its poisonous quality, but he has failed to prove that the same result which takes place in the test glass takes place in the tissues. The discovery is therefore of no practical value. The author proposes, we observe, to continue his experiments in conjunction with Dr. E. Laurie.

Hydayat-ul-hukuma: A Guide to Medical Officers and Subordinates of the Indian Service.

By GEO. L. RANKING, A. B. A., M. B., Cantab, Surgeon, Indian Medical Service. Calcutta, Thacker Spink & Co.

THIS little work is designed to be an aid to passing the "Lower Standard Examination" and assist young officers of the Indian Medical Service in understanding their duties on first appointment to a Native Regiment. It consists of a grammar, a few hints and rules connected with hospital management, select sentences (Hindustani and English) relating to hospital work, a list of returns and a vocabulary (English-Hindustani). We have no doubt that the little work will be found useful for the purposes