

11th August, I find the following entry :—" Up to the present time the health of the asylum has been excellent, though cholera has been prevailing in the city for at least seven weeks, and has carried off probably four or five hundred victims." That this exemption from the disease was largely attributable to the sanitary improvements previously effected, and to the hygienic regulations enforced under my direction, I would not dispute ; but at the time I placed my chief reliance on a stringent system of prohibition of city visitation by the servants of the establishment. An addition to the monthly wages was given to all who obeyed the instruction, and any one discovered to have disobeyed was forthwith discharged ; it was however very creditable to the service, that only in one instance was it necessary to enforce this penalty. The asylum continued free from the disease throughout the whole period of its prevalence in the city. The cholera shed was within a short distance of the boundary wall.

Toronto was exposed to another visitation of this disease in August, 1866, when a man arriving by rail from the United States, was found suffering under it. He was promptly removed to the General Hospital, where no doubt all proper precautions of isolation and disinfection were carried into effect. He had all the characteristic symptoms of Asiatic cholera, and he died within a few hours. It was reported that his nurse died of the disease a day or two after, but of this I had no certain information. A travelling companion of this man was stated to have died next day of cholera at Port Hope. Had the first case in 1854 been as promptly isolated as this was, who will assert that hundreds of valuable lives might not have been saved?

It seems to me a logical impossibility to study dispassionately the history of cholera visitations in Canada, and to reach any conclusion save one as to its mode of transmission from place to place, and its communication from person to person. The most strenuous advocate of the theory of contagion cannot however deny that the disease is discriminative in the selection of its victims, nor will he assert that its virulence and epidemic pervasion are not intensely aggravated by the disregard of sanitary and hygienic precautions ; but what have we ever learned, in the annals of the pestilence, that proves its transmission from coun-

try to country and town to town, without the intervention of human travel or traffic?

It has kept pace with the march of armies, the advance of caravans, and the trail of Mahommedan pilgrimages ; it has threaded its way along the coasts of oceans and of inland seas, up or down the valleys of rivers, and along the lines of railways ; it has crossed oceans and high mountain chains, with winds abaft or ahead. It is a disease of man, and it follows man, or rather it keeps pace with him, go whither he may, when bearing with him its specific seed, dare I not now say, its special germ? Who knows? Let us await with becoming patience the result of the practical enquiries and personal observances of the pupils of that prince of etiological scrutinizers, the world-famed Pasteurs who are now pursuing their searches in the Delta of the Nile.

In the *Popular Science Monthly* for the present September, I have read, with much interest, a lecture on "*The Germ theory of Disease*," by Prof. H. Gradle, M.D., of Chicago, from which I quote the following passage :

" Thus exposed from all quarters to the attacks of these merciless invaders (bacteria, etc., etc.,) it seems almost strange that we can resist their attacks to the extent that we do. In fact, one of the arguments used against the germ theory—a weak one it is true—is, that while it explains why some fall victims to the germs, it does not explain why all others do not share their fate. If all of us are threatened alike by the invisible enemies in the air we breathe, how is it that so many escape? If we expose a hundred flasks of meat-broth to the same atmosphere, they will all become tainted alike, and in the same time. But the animal body is not a dead soil in which bacteria can vegetate without disturbance. Though our blood and juices are the most perfect food the parasites require, and though the animal temperature gives them the best conditions of life, they must still struggle for their existence with the cells of the animal body. We do not yet know in what way our tissues defend themselves, but that they do resist, and often successfully, is an inevitable conclusion. We can show this resistance experimentally in some cases. The ordinary putrefaction—bacteria can thrive excellently in dead blood, but if injected into the living blood-vessels they speedily perish."

In the above lines there is much in small space