break of cholera; and perhaps Halifax was never in a cleaner or more healthy condition than at the close of the past summer.

Many citizens, however, are aware that the drainage is inadequate and defective, that with the extension of the city, there has been an increase in the number of cess-pits, and that to render Halifax in some measure secure from the dangers, to which, as a principal seaport, it is specially liable, some system ought to be adopted and enforced to prevent the accumulation of large masses of filth, &c., in the immediate vicinity of numbers of dwellings.

In by far the larger part of the city the cess-pit affords the only means by which families can get rid of excreta and other matters. However carefully looked after, the constant putrefaction and decay always taking place in these receptacles are sources of danger to the whole community. The operation of cleaning them is expensive and unhealthy, while the very valuable fertilizing matters contained are almost entirely lost. Of late years in the large cities of Great Britain considerable attention has been paid to drainage and the influence of cess-pits on the public health. The construction of very costly systems of sewerage, the various schemes for utilizing the sewage of towns, the efforts made to improve the dwellings and habits of the poorer classes, all shew the importance attached to these matters abroad. In Halifax on the contrary; no general measures have been taken to prevent the accumulation of filth, so that every spring the same amount of cleaning out back yards, &c., has to be performed.

All systems of water sewerage are necessarily very expensive and wasteful. Were Halifax at this moment thoroughly drained, the present water supply would not meet the wants of the city. The valuable fertilizing matters would of course be lost. A serious objection to the adoption of such a system for many sanitary purposes is the pollution of rivers and harbours. In Great Britain this has become a very serious evil. This harbour, though large, has but a moderate tide; there is consequently but little current, and all sewage discharged into it cannot be carried away from the wharves. In London it was found that the sewage discharged into the Thames, a river with a rapid current and strong tide, merely floated up and down the stream until the whole body of water became offensive.—The same thing, of course in a modified degree, takes place in our harbour; and if Halifax becomes, as every citizen must hope it will become, a large and populous commercial city, the discharge of sewerage into the harbour will be attended with very similar results. To prevent the pollution of water as well as to deodorize and save the sewage of villages and towns, a new system has been invented, and in England is gradually becoming more generally adopted.

Before however it is shewn how this can be applied to Halifax and the whole country, it will perhaps be necessary to state that a large sum of money is annually lost by the present state of the cess-pit drainage. The value of the fertilizing matters lost in Halifax cannot be less than $30,000 per annum. This is taking a low estimate. Some chemists estimate as high as $2 per head per annum, while the inventor of the system claims a saving of from $1.50 to $2.50 per head.

The use of dry earth instead of water for the removal of excrementitious and other offensive matter has proved to be successful. This system has been introduced into British India, and the inspector general of gaols in Bengal, in his report 1861–5, states "that the introduction of it has been attended with success, that it has removed the greatest defect in the sanitary arrangements of Indian prisons, and that it is without exception the greatest public benefit conferred by a private individual in a matter so essential to the public health." If successful in such a climate, if introduced there into upwards of 200 gaols and other public buildings, there is no reason why it should not succeed in Nova Scotia. An English clergyman, the Rev. Henry Moule, was led by the state of a portion of his parish to devote his spare time in endeavouring to discover some method of remedying the evils of the cess-pit system. A district in his parish was, like parts of Halifax, almost honeycombed with these receptacles. The result was the invention of the earth closet. This has already been adopted on estates and in villages in different parts of England; and it is asserted that the mixture produced by using dry earth, is equal as a manure to crushed bones in power, and is more immediate in its action. In China, earth as a deodorizer has been used from time immemorial. That country is too thickly populated to allow of any waste of fertilizing matter, and from some of the towns thousands of tons are sent up the rivers to fertilize and enrich the fields. The dry earth system effectually destroys foul and noxious smells. It is "admissible into sick rooms and hospitals" a point of very great importance. It affords the only method of deodorizing and rendering inoffensive public urinals. It obviates the contamination of well water, and does not increase taxes or other burdens on the poorer classes.

This system is founded upon the capability of dry earth or clay for deodorization. The earth used must be dry, thoroughly dry. This is a point of the first importance, and it must also be fine enough to pass through a quarter inch mesh. About two pounds weight, or in measure three half pints, are sufficient for each person at a time, and this when intimately mixed with the excreta and dried can be used again and again. The inventor states that he has used it successfully ten times. The necessity of mixing the earth with the excreta is done away with where the mass falls into a vault three or four feet deep. The weight of superincumbent matter rapidly effects a thorough mixture, and it may be there for months looking and smelling like fresh earth. It can be removed without offence to the public and with the greatest ease. In some parts of England companies are formed who supply the earth to houses and remove the enriched soil. There is no serious difficulty in applying it to every cess-pit in Halifax and making them a source of profit. In the case of ordinary cess-pits they should first be thoroughly cleaned out, the pit then made water tight, and where the occupants of dwellings are too poor to pay for the simple machinery of an earth closet, a barrel of dry earth may stand in a convenient place and a sufficient amount be thrown into the pit each day. The quantity of earth required is not nearly so large as might be expected, an average of 4 lb. per day for each person being sufficient, being about 13 cwt. per annum—not more than a good cart load. In place of the earth supplied, the contractor or farmer would receive back the same material increased in weight and enriched by many of the most valuable fertilizing matters known to the agricultural chemist. In such institutions as the City Hospital and Poor House this method would be invaluable, as in case of infectious disease all offensive matter could be deodorized at once. The earth closet attacks the evils arising from the use of cess-pits and water closets in detail, and although it cannot take the place of all drainage, yet if properly carried out it obviates the necessity of very expensive works, substituting in place thereof a lighter and cheaper form of drain. There will of course be difficulties in the way of its adoption, perhaps even in giving it a fair trial. Some little care is required, for the earth used must be thoroughly dry, and in winter there would necessarily be some difficulty in obtaining this if not stored up before the frost set in. On an estate in England, that of Baron Rothschild, a small kiln is used, and it is asserted that one large enough for the supply of a thousand people can be constructed for $100. In dwelling houses the use of this system does away with the danger arising from the freezing of water pipes connected with the closets. The necessary apparatus is exceedingly simple and cheap; and it need not get out of order, for it merely consists of some simple means of supplying a sufficient quantity of earth after each person has used the closet