

brought to light. Indeed, we shall not be far wrong in saying that there is nothing really new to report. We think, however, that it may be justly remarked that a great deal more common sense is being brought to bear year by year on the question of sewage disposal. Any one process is not being employed in such wholesale fashion as was formerly the case just because it was fashionable to use it, but our engineers are getting more and more to understand the principles underlying the science of sewage disposal. So expert are they becoming in this direction—that is to say, in the manipulation of the organisms beneficently provided by Nature—that it is difficult to see how there can be any very great improvement in the processes at present extant. It is, however, by no means always that full advantage is taken of existing knowledge. Then, again, the question is frequently brought up as to whether, in treating sewage as we do, we are really proceeding on the right lines. Nature clearly intended the earth for the disposal of sewage, and though we have learnt very accurately to reproduce artificially the action of the earth, we are losing the enrichment of the soil which would ensue from the proper application of sewage to land.

A series of experiments, however, have been carried out by Drs. P. Remlinger and O. Nouri to ascertain (1) whether pathogenic germs in the soil are absorbed into the tissues of plants growing in such soils, and (2) whether such germs are carried on the stems and leaves of growing plants. Such vegetables and fruits as beans, celery, cress, cucumbers, onions, peas, radishes, salads and strawberries were investigated. The experiments were only of a laboratory order, but were carried out in such a manner as to approximate as nearly as possible to natural conditions. The soil was freely contaminated with pathogenic bacteria, the vibriion of cholera, the bacillus of anthrax, *B. typhosus*, and *B. prodigiosus*, &c. In the first set of experiments the seeds were allowed to germinate, and when the shoots were about 3 inches above the soil cuttings were taken and cultivation made of the juices. In no case was there any result, and the experimenters consider themselves justified in stating that microbes do not penetrate into the interior of growing

plants. As regard outer contamination, the results were not so conclusive. Some of the germs, notably those of anthrax and *B. prodigiosus*, were found more or less frequently on the surfaces of the plants. Apparently, however, those of typhoid and cholera were not found, and that of tuberculosis but seldom. The chances of contamination appeared to decrease with the age of the plant.

There is pressing need of improving the sanitation, or rather, the lack of it, in most of our schools. We have scarcely one school in the county where there is a properly arranged and managed drinking system. Many of the schools are still clinging to the primitive and unhealthful bucket and dipper. A few have barrels and faucets to provide the pupils drinking water, but there you will find the public drinking cup. The worst thing of all, however, is our antiquated and in many cases actually repulsive and dangerous system of providing closets and lavatories. Of course we had to have buildings and equipment first of all. Now the great problem comes in the conservation of the health of the pupils—and that means also the conservation of morals and decency. Sanitation of the schools has been sadly neglected. This is so because of the lack of funds sufficient to erect the buildings and equip them and at the same time arrange surrounding conditions as we would have them. But we know that if the School Improvement Associations and the Mothers' Clubs and the patrons of the schools generally will take the trouble to investigate these vital matters concerned with the health and sanitation, there will be such an aroused public sentiment for better lavatories and closets in the schools that their provision will certainly be made soon.

It has been suggested recently by those familiar with the work being done by the School Improvement Associations and Mothers' Clubs that these excellent organizations deserve much credit for their interest expended for the most part upon the interior of the school rooms and the immediate surroundings, such as fences and lawns and playgrounds, but that if some of the ladies would take it into their heads to examine the vitally important conditions existing in closets and lavatories at