

be found in cultivating proper organisms, the whole audience laughed heartily. He persevered in his work however, and in 1892 he was authorized to lay out a bed of one acre at Barking, which was filled to a depth of about three feet with pan breeze.

After many experiments and some failures, this bed was found to remove 85 per cent. of the impurities from sewage when applied at the enormous rate of 800,000 gallons per day. In 1898 the depth of material was increased to six feet, but the writer was informed by the present chemist in charge, Mr. E. Burke Pike, that the increased depth of filling did not increase the capacity of the bed.

In 1894 Sutton (Surrey) laid out and built sewage disposal works at a cost of £66,000. The system adopted was one of chemical precipitation followed by artificial filtration through a patented material, the sludge being pressed into cakes.

In 1895 the Sutton authorities found that the works were unable to so purify the sewage as to meet the requirements of the Thames Conservancy Board owing to a failure of filters. Mr. Dibdin was then consulted and in 1896 a coarse bed was constructed according to his designs, to take the place of the chemical precipitation and the sludge pressing plant, all of the suspended matter in the sewage being destroyed in the interstices of the filling material. Additional beds have been constructed since 1896, and the sludge pressing plant is now for sale, while the effluent is quite satisfactory.

Sutton soon became a Mecca to which deputations and sanitarians journeyed from all parts of the kingdom, and there are now dozens of cities and towns that are constructing Bacteria Beds. The English Engineer is so conservative and cautious that as a rule he insists on conducting experiments with the sewage from his own town on small beds filled with various materials, before recommending the adoption of any general plan for all of the sewage.

The writer visited the experimental works at Manchester, Oldham, Huddersfield, Salford, Leeds, Sheffield, Accrington, Bristol, and other places, but as the final reports on some of these experiments have not as yet been published, it can only be stated in a general way, that the results from Bacteria Beds are satisfactory in every way.