

conduit-pipes used to convey the sewage to these farms from the various districts of Berlin varied from 964 mètres to 18,628 mètres. So perfectly healthy were the farms that convalescent homes had been erected on them. The persons employed on the farms consisted of 40 officials, 45 gardeners, smiths, and dairymen, 480 male and 125 female labourers, 966 workhouse hands, continually employed, and 360 men, women, and children, employed from April to October. In one week in October, 1787, 30,000 cwt of cabbage were sent by rail to Berlin from only one of the farms at Osdorf. In 1885 there were about 275 hectares under root crops, 91 under hemp, 1,625 under wheat and other cereals, 44 of peas and beans, 138 under fodder, 696 under potatoes, cabbages and, the like, 77 in nursery gardens, 1,267 under meadowland and pasture. On March 31st, 1886, the capital borrowed by the sewage irrigation authorities of Berlin appeared to have been £3,211,138 whilst Sir R. Rawlinson had said, at the Society of Arts in 1887, that the sewage experiment at London would cost ten millions sterling for no purpose and no benefit to agriculture. In 1887 Dr. Collingridge, the Medical Officer at the Port of London, said that the condition of the Thames was as bad as ever in spite of the chemicals ; and calculating the value of London sewage with a population of about four and a quarter millions, it had been said it should be worth a £1,000,000 a year and that it might raise fodder enough to feed 200,000 cows annually and thus give milk to London children. Mr. Bailey Denton, an engineer of great experience, and Colonel Jones, of Wrexham a sewage farmer himself, had a project to convey the London sewage to an island, Canvey island, 20 miles beyond Barking, where it might be partly utilised on 475,000 acres of land, and the pipe might be tapped on the way and irrigate thousands of suitable acres in Essex, etc. Canvey Island was about 35 miles from London Bridge, and it was calculated that, with a current of three miles an hour, the sewage would reach it in 12 hours.

Dr. T. J. Dyke, Medical Officer Urban and Rural, Merthyr Tydfil, said that in 1871 the Local Board of Health of Merthyr Tydfil entrusted to Mr. J. Bailey Denton, C. E., the employment of the best known method of disposing of the sewage from the residence in Merthyr, Dowlais, etc. Mr. Denton advised the adoption of the process of Dr. Edward Frankland, known as the Downward Intermittent Filtration process. A site was chosen at Troedyrhiw, three miles below Merthyr, on the west bank of the Taff River : there on a gravelly soil Mr. Denton formed filtration areas on sections of land, by deep drainage, levelling of surface, and provision of an efficient outlet for the effluent water. Each area or section was flooded with strained sewage for six hours, and allowed to rest, to drain, and to be aerated for eighteen hours. The work was completed in the spring of 1881, and thenceforth from one to three hundred thousand gallons of the strained liquid has daily been passed over and through the soil of the twenty acres of land so prepared. The surveyor, Mr. Harpur, and the superintendent, Mr. Baltram, concur in stating that the work has been