meadows, whilst the flatter fields are used for the cultivation of roots; and some fields are covered in winter time by sewage for some months, and then used for the production of cereals in spring. The water is conveyed from the highest point of the fields by ditches, half a metre in depth, and where root crops are concerned the sewage is allowed only to touch the roots of the plants; but in the case of meadows it flows over the whole surface of the meadow. The idea that such farms become unfit for use in some years by clogging up, and then unable to purify sewage any longer, is known to be erroneous, and after many years of use the sewage water is still only a slightly muddy fluid, and the effluent is pure, clear and inodorous.

With respect to the expense of the farm, the older portion cost about 8,000*l.*, which at 3½ per cent. would require 28,000*l.* as interest on capital. In 1889 these farms yielded less than this to the extent of 16,000*l.* which was all that the city of Berlin had to pay in aid of them, whereas, London has to pay an endless amount for the construction of useless tanks at Barking, sludge vessels, &c., and all without raising a blade of grass or a single root by the aid of her sewage.

In Frankfort the cost per head for classifying the sewage was found to be 1.22 mark; in Wiesbaden, 0.68 mark, and in Berlin only 0.48 mark, or about 5½*d.* per head of the population per annum. But the machinery used for the purification of sewage where there is no sewage farm goes on continually diminishing in value; whereas the sewage farms become always more and more valuable as property. So that both with respect to the condition of the effluent and the expense, the Berlin system is vastly superior to the London system. With respect to the effluent the thirteen years' experience of some of the Berlin farms shows how pure it is, and that it will always remain as pure is now ascertained. The effluent has almost no suspended solids in it, all being removed by filtration through the ground. Sometimes the effluent from the basins contains iron, and in such a case the water may be opaque and like lime-water. There were very few microbes in the effluent. In 100,000 parts of Berlin sewage arriving at Osdorf, there are about 16 parts of ammonia, and in the effluent only a trace of this product. The amount of chloride is not changed by irrigation; 100,000 parts of sewage require 28 parts of permanganate of potash to oxidize it, and the same quantity of effluent required only two parts of the salt to do so. Of course all sewage contains far more salt than can be utilized by the plants; but this does not effect the excellent quality of the effluent. Grass lands purify rather better than root crops. Only 1-26th of the phosphoric acid contained in the sewage appears in the effluent.

The city of Berlin has taken advantage of the existence of the farms to employ a number of persons in agriculture. Some of the workmen receive in wages and kind of value of about 60*l.* yearly. The day laborers receive about 20*l.* and women about 10*l.*, with lodging and farm produce, which makes the yearly income of each family about 60*l.* also. There are also about 900 paupers who are employed on the farms according to their powers. The produce of their labor is estimated as about worth one-fourth of that of the ordinary laborers. The health of the population employed on the farms has been examined by Professor Virchow and found to be excellent. Thus, in 1889, there was not a single case of typhoid fever among them, although that disease prevailed in Berlin for a time in that year. That population consisted of 1,960 persons. There were only thirteen deaths in the year and of these only three were grown up persons, the rest were children. There was very little contagious disease among the employees; a few cases of measles, diphtheria and croup were mentioned. There was no evidence of any disease caused by the irrigations. Altogether, the experiment made in Berlin, and which might equally be made in London, is a splendid success. It is true that the situation of Berlin, in the midst of a plain, is favorable; but as Dr. Carpenter, of Croydon, has often taught, all soils can be used for irrigation if only too much is not put upon a soil that is unsuited for heavy doses of sewage. Eventually, said Dr. Drysdale, I feel sure that all cities will imitate Berlin. Only it is humiliating to think that London should lie so much in the rear of scientific practice, and require so much wakening up to make it attend to its own best interests in this matter.