Captain Liernur lays it down as an imperative rule that such cleaning must be done separately, and that each manufacturer must be made responsible for so doing. The question as to who should bear the cost is one open to discussion. In most cases the person making the profit must put up with the loss such cleaning may entail, but there are, no doubt, cases in which it should in part be borne by the community. The business of the engineer is simply to devise a means of testing whether this cleaning is done. For this purpose, Captain Liernur makes a small dip, or bend, in the branch pipe from the factory, just before entering the sewer. On this he erects a pipe accessible from the street, so that the inspector of nuisances can at any time take a sample for analysis.

Thirdly, as to street dirt. To prevent this from entering the sewers, Captain Liernur, in the first place, reduces the quantity of rain-water flowing from the surface of the street into the street gullies to the smallest possible quantity, seeing that it is this particular water which brings the detritus into the sewer. Secondly, he employs a pavement, which of itself furnishes no detritus or dust through wear and tear; and thirdly, insists upon street sweeping being done regularly and by machines, instead of by manual labor. To reduce the quantity of street-water flowing into the gullies, Captain Liernur lays the pavement nearly flat over its cross-section, so that the rain-water, instead of rushing to the gutter and there accumulating, remains not only divided, so as to obtain nowhere great depth, but is exposed as long as possible to evaporation and absorption. For the same purpose of prolonging this powerful agency for diminishing the quantity flowing off, he places the gullies as far apart as admissible for taking in roof and sidewalk water. By acting in this manner, it is only in case of violent and continuous rain that any water from the streets flows in the gullies at all, and then only a small proportion of it (about one-fourth). In ordinary rains, fully four-fifths of the water are evaporated, and the remainder is absorbed, thus entering the sewer in time as percolated or subsoil water. To