

health; a city in whose municipal administration the highest place was accorded to the sanitary corps; a city which supplied pure drinking water of crystalline purity from the distant mountain lakes and streams by its seven or eight great aqueducts, of which four still remain; aqueducts dating back to centuries before the Christian era; aqueducts considered so important that under Nerva and Trajan no less than seven hundred and twenty "curatores aquarum," engineers, architects and others, were continuously employed at the public expense to look after the water supply of the city; a city with public baths capable of accommodating all the citizens, for there were some eight hundred bath-houses throughout the city, the Thermæ of Caracalla, Diocletian, Nero, Titus, Agrippa, and countless others; a city with a system of sewers dating back to Tarquinius Priscus and Tarquinius Superbus, six hundred years B.C. The Cloaca Maxima, the main drain, built in triple arches of Etruscan architecture, was so large that barges could float upon it all under the city; and so well constructed that no earthquake or other force has altered it. Though choked up nearly to its top by the artificial elevation of the surface of modern Rome, it is curious to see it still serving as the common sewer of the city after the lapse of nearly three thousand years. Under the Empire, condemned criminals repaired the sewers. To what better work could our modern jail birds be put, than that of similarly working for the sanitary well-being of their communities?

A proper drainage system is the first great duty of municipal sanitation. It must precede the water works, and be in readiness to carry off the water. To reverse this order has been well stigmatized as preposterous in its original signification of "pre," first, and "posterus," coming last, or putting the cart before the horse. And the very worst use that can be made of drainage is to pollute some river or stream with it; it is a waste of valuable fertilizers and a wrong to other communities down stream. Cities and towns must ere long come to the purification of their sewage by septic tanks, chemical precipitation tanks, or filter beds, and the using up of the effluent in subsoil irrigation.

A good water supply is the next most pressing duty of municipal sanitation. As a model from the past in this respect, I have spoken of Rome. Jerusalem also, before the days of Solomon, had aqueducts bringing water from miles distant, and through a reservoir which served as a sedimentation tank. We have another notable example in Tenochtitlan, the ancient Toltec capital, now the city of Mexico, with its admirable water works dating back long before the first meeting of Cortez and Montezuma, the Aztec chief. The difficulty of finding a pure water supply in sufficient quantity is facing every city.