

done much in deducing the fundamental laws of sanitation on which have been built the great and useful work of sanitarians generally.

Without going farther it is enough to announce the fact that the chief health authorities of to-day in the great cities of the world and generally in all stations and places of importance where the health of citizens or armies must be guarded, are State Medicine specialists, members of our profession. I would say this itself is sufficient reason why our Academy should maintain a special health department.

Before going more deeply into our plea I would like to say at the outset, not only for myself, that for every scientific physician present, that we are neither pessimistic nor optimistic on the subject of preventive medicine, but feel rather that this special line of medical work is to-day a factor of no less importance and value to the individual and to the state than is any other in the wide range of medicine or her allied arts and sciences.

Though almost the entire community has shared with ourselves as physicians in the reform and improvement in sanitation still this is a line of achievement in which the medical has taken the lion's share, especially in preaching and urging; and more recently as to the general supervision and carrying out.

Public sanitation is a development chiefly of the latter half of the nineteenth century, though not entirely so. For example many works such as systems of sewerage, public water supplies and municipal baths, were carried to a high degree of perfection in the days of ancient Greece and Italy, particularly the latter.

When our predecessors started in to reform and improve the terribly insanitary conditions which once prevailed in cities there were more serious and difficult problems to face and solve, probably than any we now have to deal with, at any rate, to deal with in matters of sanitation.

In no way can I illustrate the forever unsatisfactory condition of cities generally better than by taking one city as an example and reporting shortly its sanitary condition some forty-two years ago. What has municipal sanitation done for the now beautiful healthy city of Edinburgh,

which maintains one of the lowest death rates of any city in the world to-day, as low at times as thirteen per thousand per annum of its population?

We answer the question by stating facts and figures, which show that Edinburgh has been transformed in these recent years from a city containing slums, hitherto worse than any in America or Europe into its present modern healthy sanitary condition.

Let us go briefly into the condition as to sanitation in Edinburgh as it actually existed in 1868, forty-two years ago. The following facts are vouched for in the report of the Edinburgh Health Officers of that time, Drs. Littlejohn and Alexander Wood, and by the Rev. R. Maguire, who was Rector of St. James, Clerkenwell. They said: "More dirt degradation, over-crowding and consequent shamelessness and unutterable wretchedness exist in Edinburgh than in any town of twice its size or in any area of similar extent to be found in the worst parts of London, Paris or New York. Here in old Edinburgh there was a loathsome infectious sore occupying a very large area of the town. The conditions were such that the inhabitants of several tenements, each tenement having a population of 250 to 300 people depended for their water supply entirely on one well in High street, opposite John Knox's house. From early morning until late at night there was a throng of people about the well waiting their turn for water. Children carried buckets to this well and often had to wait one to five hours to get their supply of water. Old people and others had to carry this water for daily use up as many as 150 steps to their homes in the tenement houses. It was a pitiful sight in the street and followed into the homes we saw how this lack of water helped to degrade. We went into thirty-seven houses that day," etc., etc.

Reading in the report we find many paragraphs similar to the one or two I now quote: "In a wretched den on the 7th storey with no direct light, a family consisting of father, mother and child, of three years were living. On the floor on a straw bed the husband was lying, having been ill with typhoid fever for six weeks. He was murmuring incessantly 'drink' 'drink.' The little child was crippled and