

But to be in a position to prevent Disease, the Sanitarian must endeavour to ascertain its causes, and the manner in which these causes react upon the organism in producing Disease.

As Health is dependent upon the maintenance of a proper balance between all the functions, and an adequate supply of pure materials to repair the constant waste, and maintain the healthy integrity of the tissues and organs, we naturally look for the causes of Disease among those circumstances likely to disturb this balance, or to vitiate or destroy this healthy integrity of structure.

The causes of Disease, however varied and numerous, may virtually all be said to act by interfering with or vitiating healthy nutrition. Most of them are connected with the ingesta and find entry to the system along with them, being either normal ingredients in improper proportion, or foreign substances abnormally mingled with them. Such causes are to be met with in the air we breathe, in the food we eat, and in the fluids we drink. Certain other active causes find entrance through wounds or abrasions, and still other causes and influences react upon the body from without, such as changes of temperature or of atmospheric pressure, physical and mental exhaustion, &c.

Among all these causes of Disease none have of late years attracted so much attention as those connected with the so-called Germ Theory. The class of Infectious or Zymotic Diseases, with others analogous to them, having been shown to depend upon specific organisms or germs for their origin and propagation, the study of these organisms in all their relations to disease has distinctly been brought within the province of Sanitary Science.

The constantly improving processes of Chemical and Physical research are also being daily brought more and more into the work of Sanitary investigation, more particularly with reference to air and ventilation, water and other beverages, and food with its adulterations. In like manner some knowledge of Architecture and Engineering, as applied not only to private dwellings, but to hospitals, schools, prisons and other public buildings, as well as to systems of drainage and other matters, is every day becoming more imperative.

There are many other directions in which Sanitary Science is extending its boundaries, and the area over which it is exercising control is daily widening in all matters in which the health of individuals and communities is concerned.

The hitherto prevailing system of the Unification of Sanitary Science is therefore no longer adequate to its requirements. No single teacher, however versatile and accomplished, can longer hope to do even moderate justice to so extensive a subject; but thanks to the generous endowment of this Department by our Chancellor, Sir