

taken up and some definite and practical plan settled upon which can be laid before the minister of agriculture, who would doubtless act upon it if possible. The expense yearly of such a department, or ordinary board if preferred, need be but comparatively trifling, and could accomplish a great amount of good in instructing the people, and creating public and individual interest, in sanitary matters.

BACILLI—GERMS OF INFECTIOUS DISEASE.

In the interests of the public health a knowledge of the germs of disease cannot be too general and clear. A vague notion has prevailed from a remote age that infectious diseases are produced by minute living organisms : but it is only since Pasteur's researches on fermentation and putrefaction, and, more recently, his experiments in inoculation, together with those of Koch, Cohn, and other investigators, that the vague notion has taken the position of a very generally accepted doctrine. Comparatively few now doubt that these diseases, or perhaps rather the symptoms and consequences of these diseases, are due to the development and growth in the human body of myriads of living bodies. In size and form these are among the smallest and simplest of living things, and their chief manifestation of life is in their wonderful power of reproduction and multiplication. In a human organism furnishing suitable soil, they rapidly become so numerous that there is as it were a struggle for life between the parasitic invaders and the natural cell elements of the body. In this and succeeding articles we purpose giving a brief history of these little bodies, so far as the present knowledge of them permits, which will it is to be hoped prove of practical advantage in relation to the suppression of infectious diseases.

There are many forms of bacteria, constituting a large class of organisms, which have been grouped together under the designation of *saprophytes* (from the Greek, signifying plants which live upon decaying organic matter). This includes all the organisms associated with the decomposition and decay of organic substances, the yeast-plant and its allies and all the varieties of bacteria. They are indeed the essential agents in all decompositions and putrefactions, and we are but just beginning to realize their importance in relation to the health and life of the human race. Most of our readers are familiar with the nature and peculiarities of the yeast-plant. There is another very common bacterium, the *bacillus subtilis*, found in