of bacteria, he will pronounce it unclean for his purposes, and he will not be satisfied until he has submitted it to boiling water for at least five minutes, or in dry air to a temperature of 240° or 250° F., and then he will require that it shall not be exposed for an instant to the ordinary air, for fear of its contamination by germs which sometimes float in the air. He will insist on these conditions because he has found by experience that ordinary clothes, ordinary air, and ordinary water generally contain germs capable of reproduction under favorable conditions, and *sometimes* contain germs capable of reproduction in the bodies of human beings, and of causing such diseases as small-pox, scarlet fever, diphtheria, etc. The experiments by Tyndall, Burdon Sanderson, Pasteur, and others, on the conditions of life and reproduction of bacteria are of very great practical importance in studies for the prevention of diseases, because they show the facts concerning lower organisms similar to those which are found to multiply in the human body during the course of some of the communicable diseases, and because they tend to reinforce our knowledge of methods of destroying the contagia of some of those diseases, such, for instance, as the virus of small-pox, and the contagium of scarlet fever, which are found to be destroyed under some of the conditions just stated—as by exposure in dry air to a temperature of 250° F. Further experiment may show that a lower temperature is sufficient; and this is to be expected, because of the comparative infrequency of extensive outbreaks of these diseases in the hot summer weather, and also because of the liability of vaccine virus to lose its activity during the heat of summer. Returning to our clean dish, which, with a little variation, might as well have been a clean article of clothing direct from a laundry, or even new goods from a store, I think it is now plain that what is perfectly clean, according to one definition, may be very far from clean according to this view of the subject, and with great certainty may convey the unseen causes of disease to any susceptible person.

NEW METHOD OF SANITATION DEMANDED.

What has just been said makes plain the necessity for new methods of sanitation. It may be well briefly to recapitulate these reasons in a slightly different manner, in order that they may more easily be kept in mind. One essential fact to be noticed is that, although the