acquire a capacity for administration, seeing that he will have to direct, and even educate, not only the members of the Board of Health, but their subordinate officials—sanitary inspectors and quarantine constables.

Here certainly is a wide field and ample scope. But he need not be dismayed or despair at the extensive range of his duties, to be performed, no doubt, in many instances gratuituously. After years of experience in this field, and speaking from long and close observation, I aver that the necessary knowledge and aptitude can be readily acquired by any medical man who will only bring sound common sense and a little acumen to bear upon his work.

I will now refer briefly to the subjects which will, I presume, present themselves to those who commence to work a Health District *de novo*.

The organization of a local Board of Health is very simple. It is composed of five, including the chairman, who is also councillor for the District. They should have a paid secretary whose duty it would be to keep a record of the meetings of the board, receive the reports of Sanitary Inspectors, issue notices for meetings and transact all other business intrusted to him by the Board.

The duties and powers of Sanitary Inspectors are defined by the Public Health Act, but it would be better if they would meet with the Board at their regular meetings. They should be required to keep a Report book in which would be entered a record of houses in which infectious disease has appeared, visits made and work executed at any particular house, complaints of rate payers and others. They should also make a sanitary report of their district at the end of the year. All orders and instructions from the Board to Sanitary Inspectors should be in writing, so that neglect of duty may be dealt with as the Act directs.

The chief diseases that will have to be dealt with are Scarlet Fever, Typhoid Fever, Diphtheria and Small-Pox. Whooping Cough and Measles we may at once dismiss from our consideration, as at present we know of no practicable available means of checking their spread among the general public, through the action of the Health authorities.

For the sake of illustration we will suppose that a medical man in a certain district meets with a case of Diphtheria. He will be called upon to promptly apply preventive measures. He is expected to use every endeavor to isolate the case, and to inform the inmates as to the Law bearing on the case, in order that the Board of Health may take the necessary steps to protect the public; and on the promptitude, energy, tact, and skill of the medical attendant, will in a great measure depend whether the disease shall spread or not. If he personally superintends or sees that the case is quarantined and the Law strictly carried out, all is well; if not, a few days will give him new cases—will more than likely leave a few more green mounds in the cemetery as a monument of "man's inhumanity to man." Should he succeed in preventing the spread of the disease it will be necessary for him, at the expiration of nine days, to see that the premises are thoroughly cleansed and disinfected. You will naturally ask, why say nine days? For this reason; I think it would be very unwise to undertake work of this kind until the patients were, if I may use the term, quite convalescent.

It is now necessary that the medical attendant should have an exact knowledge of the nature of the action of particular disinfectants. Were the *rationale* of the action of these more generally known, we should not find, as is too often the case, messes made of mixtures of Sulphurous Acid and Chlorine, Carbolic Acid and Chloride of Lime, Condy's Fluids and Carbolic Acid. Too frequently it seems to be the thought that to create a disagreeable odor is the main object of disinfection.

The Committee on Disinfectants of the American Public Health Association define a disinfectant as "an agent capable of destroying the infective power of infectious material." The object of disinfection is to prevent the extension of infectious diseases by destroying the specific infectious material, which gives rise to them. This is accomplished by the use of disinfectants. This Committee in its report further state that "there can be no *partial disinfection* of such material; either its infecting power is destroyed, or it is not. In the latter case there is a failure to disinfect. Nor can there be any disinfection in the absence of infectious material. "This popular use of the term has led to much misapprehension, and the agents which have been found to destroy bad odors, —deodorizers—or to arrest putrefactive decomposition, —Antiseptics,—have been confidently recommended and extensively used for the destruction of disease germs in the excreta of patients with Cholera, Typoid Fever, &c., &c."

The injurious consequences which are likely to result from such misapprehension and misuse of the word disinfectant will be appreciated when it is known that recent researches have demonstrated that many of the agents which have been found useful as deodorizers, or as antiseptics, are entirely without value for the destruction of disease germs."

This is true, for example, as regards the Sulphate of Iron, or Copperas, a salt which has been extensively used with the idea that it is a valuable germicide. As a matter of fact Sulphate of Iron in saturated solution does not destroy the vitality of disease germs, or the infecting powers of material containing them. This salt is, nevertheless, a very valuable antiseptic, and its low price makes it one of the most available agents for the arrest of putrefactive decomposition in privy vaults, &c., &c.

It must be borne in mind that one variety of Bacteria, (spherical,) multiply only by *binary* division, and another variety in addition to this process of development also form *spores*, (rod shaped Bacteria or Bacilli,) the point of interest being that the spore variety possesses a resisting power to heat, and to the action of chemical disinfectants, far beyond that