

sequences." In favor of the first view are the following facts—(a) negatively, the absence in a large proportion of cases of any discoverable cause likely to excite inflammation of the lungs, and (b) positively, the suddenness of the onset of the disease, its well-defined course, its occasional epidemic and contagious character, the presence of bacteria in the blood, and the frequent appearance of a cutaneous affection (herpes), possibly analogous to the rash of the exanthemata. A point corroborative of the above is the well-known want of synchronism between the clinical progress of the case and the pulmonary condition. Thus, it is very common for the temperature to fall to normal and all the symptoms to abate, while the physical signs of pulmonary consolidation remain practically unchanged. Less frequently, but still not very rarely, the consolidation may show signs of resolution before there has been any abatement of the clinical symptoms."

The above evidence seems strong, and if we confined our attention to it we might conclude with some confidence that pneumonia must take its place among "specific" diseases. But, unfortunately, there are some points of great weight that tell against this view. Thus pneumonia is only very exceptionally epidemic, and its contagiousness, although held by some good observers, is still doubtful. Again, the influence of season is very apparent, the preponderance of pneumonia falling in the months from January to May. It might be urged, in reply to this, that just as pneumonia shows a preference for the late winter and early spring, so typhoid fever inclines to occur as an autumnal disease. But it seems impossible to resist the evidence that the frequency of pneumonia is much influenced not only by season, but by weather, cold winds, and sudden changes of temperature predisposing to it. In this regard, pneumonia shows an affinity with pulmonary disease and other affections that are admittedly due to "chill." Then, again, while there is often a want of synchronism between the physical signs and the symptoms of pneumonia, we have to recognize, on the other hand, such a fact as the greatly increased mortality which attends bilateral, as opposed to unilateral, pneumonia.

In so far as treatment throws any light on this subject there are facts on both sides. The general stimulant treatment of pneumonia, now almost universally adopted, hardly differs essentially from the treatment of the continued fevers, and is obviously adapted rather to the theory that pneumonia is a "specific" disease than to the belief that it is a local inflammation. On the other hand, local applications to the chest in the form of poultices, icebags, etc., have enjoyed much favor, and have been believed by some authorities to influence the progress of the disease. Stimulating expectorants, again, generally play a con-

siderable part in the therapeutics of pneumonia. Summing up the subject, Wilson Fox wrote: "The theory of a 'specific' cause can scarcely be maintained for pneumonia in the same sense as that in which the term is applied for the contagious pyrexial diseases. The causes of pneumonia are manifold, and the disease may originate under such diverse conditions that it seems impossible to attribute it to any single blood poison. On the other hand, the most probable hypothesis to explain its origin is that of an altered composition of, the existence of some morbid material in, the blood, which, from its special qualities, may affect a particular organ, or, as is more probable, may, under local predisposing causes, excite inflammation in that part of the system which in any given individual is the most liable to suffer, as a *locus minoris resistentiæ*." We have no knowledge of the nature of the changes in the blood that predispose to pneumonia. The excess of fibrine that has been described has been shown by Virchow to be the consequence, rather than the cause, of the pulmonary inflammation. In some cases, no doubt, pneumonia is due to septicæmia, but this is not at all probable of the typical acute disease. It is rather a curious circumstance that while theoretical considerations and clinical evidence seem at present inadequate to fix definitely the pathological relations of pneumonia, the response of pathology and bacteriology is also somewhat equivocal. It is true that the researches of the bacteriologist of late years have considerably advanced our knowledge of this part of the subject. From them we learn that the microbe most constantly present in pneumonic exudation, and in that of the inflammatory affections with which pneumonia is often complicated, is the diplococcus discovered by Fränkel and Weichselbaum; whereas Friedländer's bacillus, like some other microbes occasionally found in pneumonia, is of exceptional occurrence. Nor must the remarkable investigation of the two Klemperers upon the toxins of the first-named organism be lost sight of, as affording additional proof of the specificity of the disease. Nevertheless, when all these contributions to knowledge are collated, it would still seem that much remains to be done before we are in a position to conclude that bacteriology has said its last word regarding pneumonia.

According to Wilson Fox, "the disorder which, on a lesser scale, presents the greatest analogy with acute pneumonia is perhaps acute tonsillitis, where we have the same short initial stage, a similar intensity of rigor and prostration, a similar sudden invasion of pyrexia, and a similar rapid decline of this before the local inflammation has shown any signs of abatement. In tonsillitis, also, we have frequently an equal difficulty with pneumonia in verifying a distinct cause, and a certain amount of evidence at least exists in the