

ence drawn by Professor Baginsky from these facts is that there are two types of disease, indistinguishable in their superficial characters, marked by a deposit of false membrane on the fauces and tonsils, and associated with fever, prostration, and swelling of lymphatic glands. The one is true diphtheria, and is caused by Loeffler's bacillus; it is of far greater severity than the other, which appears to be excited by staphylococci and streptococci, and runs mostly a favorable course. Nor is the latter so remarkably contagious as the former; whilst he has known the bacillary disease to supervene upon and prove fatal in a child who had gone through the milder affection. So convinced is he of the value of this distinction that he has devised apparatus for conducting this bacteriological inquiry as a part of clinical investigation; but as was pointed out by Professor Henoch, the time required to obtain the characteristic cultures would render of little use the information gained therefrom. Moreover, as other speakers said, the delicacy of bacteriological experimentation was such that it could hardly be expected to become the appendage of every clinician. Professor Baginsky's research further led him to establish that the mild and non-contagious malady known as "rhinitis fibrinosa" was dependent on Loeffler's bacillus. At any rate this microbe was found in the membrane from two cases of this affection, suggesting, he said, a relationship to diphtheria akin to that of varioloid to variola. On the other hand, he proved by the same method of investigation that the so-called scarlatinal "diphtheria" has nothing to do with true diphtheria. For in all the cases of this class that he had examined, he had never once found the bacillus of Loeffler, but only cocci in the false membrane. Moreover, in cases of true bacillary diphtheria, upon which scarlet fever or a scarlatinal rash supervened, the growth of bacilli was replaced by that of cocci, thus appearing as if a new contagium had driven the old one out of the field.

As might have been expected, this novel method of diagnosis and the ideas that flowed from it gave rise to considerable discussion. Dr. Ritter, who had some years ago pursued a similar inquiry, had also found the bacillus absent in a certain number of cases of supposed diphtheria. He pointed out that one great distinction between septic disease and diphtheria consists in the fact that the diphtheria bacillus is only to be found locally in the false membranes, whereas in septicemia streptococci are met with in the blood. He repeated the well-recognized clinical fact that diphtheria may by its local lesions afford entrance to septic organisms; and as regards scarlatinal angina, he said that he had found the diphtheria bacillus in one out of nine cases examined. Dr. Zariniko protested warmly against the labors of German investigators upon the diphtheria contagium being

ignored, and said that no new facts had been adduced by Professor Baginsky. He thought, however, that the latter's observations on scarlet fever were of importance, but could not reconcile the discovery of Loeffler's bacillus in the purely local affection—rhinitis fibrinosa—with the known history of the diphtherial virus. Dr. Troje said that, after all, the application of Professor Baginsky's test would not give *certainly* to a diagnosis of true diphtheria—that could only follow on the results of inoculation; and for his own part he would not regard the occurrence of a streptococcal invasion of the injured parts with such favor as Professor Baginsky would, since it points to a septicæmic condition. He alluded also to observations by Barbier and Dahmer, which went to prove that a "mixed infection" of the diphtheria bacillus and of streptococci was of the greatest gravity. Dr. B. Fraenkel admitted the occurrence of a non-bacillary membranous pharyngitis; he doubted, however, the practical utility of placing the fine methods of bacteriological analysis in the hands of private practitioners. Professor Henoch spoke in much the same strain, doubting if the methods described could add much to clinical facts which pointed to the relative severity of attacks of alleged diphtheria. He hoped, however, that the vexed question of the nature of primary membranous croup would be determined by these methods of research; and he was pleased to find a confirmation of the view he had long held as to the non-diphtheritic character of membranous exudation in scarlet fever confirmed. Dr. Scheinman desired more information as to the presence of the diphtheria bacillus in rhinitis, which was a purely local affection. If correct, the observation would tend to mitigate the unfavorable prognosis which the presence of the bacillus might convey. Dr. P. Guttman was sceptical as to the non-diphtherial character of cases in which the bacillus was found, urging that it might have been present at an earlier stage, and had then been replaced by other microbes. He also asked as to the relationship of primary croup to diphtheria. The debate was closed by the President, Professor Virchow, who recalled the meeting to the old and essential definitions of diphtheria (a necrotising process), and who pointed out the need for a revised nomenclature of such diseases which have been proved to be dependent upon the action of bacteria. For the anatomical term "diphtheria" embraces far more than the disease evoked by the diphtheria bacillus; and a croupous exudation may be caused by the latter as also by other agencies. He urged the necessity of having botanical terms applied to distinguish these different organisms, so as to avoid the confounding of conditions which were etiologically or anatomically dissimilar. In his reply, Professor Baginsky maintained his position, and held that the difficulties of the method