

pharynx, but some frothy mucus. She had quick, frequent pulse, with high temperature. The most marked feature besides was incessant cough. From Friday till Tuesday, she continued in this condition with obstructed respiration, and she was treated for membranous croup. Calomel being administered in frequent doses, and also antimony to vomiting. The diagnosis lay between membranous croup, and non-membranous catarrhal inflammation. Diphtheria was considered, but only in a speculative way. On Tuesday, distinct patches were seen on the tonsils, afterwards on the palate, and other parts of the fauces. There was from this time little doubt of its being diphtheria. She ultimately got well. During the second week of her illness, a small sister of the patient, who had communication with the sick one exhibited symptoms of pharyngeal diphtheria, of which disease she died in a short time. Then another child six years of age had an attack. In this case, if the first child had not shown ocular signs of diphtheria in the pharynx subsequent to the tracheal symptoms, and the other children remained well it would have been counted as croup, without question of diphtheria, whatever the event.

#### Another case :

On a Thursday a girl about 8 years of age was seen suffering from the symptoms of croup. There were no reasons for considering it diphtheria, except that it was croup. On Sunday evening the dyspnoea was so great that nothing but tracheotomy would save her. The operation was performed under very adverse circumstances. On the evening of the operation patches of false membrane appeared on the fauces, afterwards the incision over the trachea became covered with diphtheritic membrane, and pieces of membrane came away through the tube. It was evident the disease in the windpipe was diphtheria. When the operation was performed no one else was ill in the house, but within a very short time, perhaps four days, two young women, both of whom were interested in the little patient so much as to be in constant attendance on her, contracted diphtheria. The mother also, and a young sister of near the same age, had attacks of pharyngeal diphtheria. In this case, without the subsequent appearance of diphtheria in other situations than the trachea, and in other persons in attendance, it would not have been suspected that the primary case was other than membranous croup. One

such case does not prove identity in all cases, but such cases are comparatively frequent, and it is the observation of them which is causing conviction that the two forms of the disease are one.

Diphtheria is not likely to recur in the same individual, for like all infectious zymotic diseases, it is probably self-protective. Croup is rarely seen a second time, if ever in the same one, while if it were a simple inflammatory disease arising from cold it would be more likely to recur in the same person.

The non-membranous or catarrhal is pre-eminently so, since children who suffer from this spurious form again and again are met with by every one. A boy 12 years old complained 24 hours after exposure in the rink with wet feet till thoroughly chilled. For the first period, while thought to be purely catarrhal, it was with some distrust it was treated so. The fever, pulse, headache, hoarse croupy cough, and obstructed respiration, were like what one meets in membranous or tracheal diphtheria, and it did not set in all at once at night as is so often the case. Afterwards he had coryza, bronchial catarrh, with disappearance of croupy symptoms, and after a fortnight he was completely well. The difficulty of diagnosis between these diseases is acknowledged by all writers.

(See Ziemssen, Vol. I. pp. 663).

But such a case might easily be treated as one of genuine croup. None would say now that in this case there was any false membrane, altho' this could not be proved except there had been examination by the laryngo scope, which is difficult to use in such a case. Why should there not have been an exudation of false membrane if such is the characteristic of simple idiopathic inflammation of the mucous membrane of the trachea. That is the exact kind of an attack that is claimed as existing in croup. No one claims for membranous croup a specific character, except those who say it is diphtheria, and who believe that diphtheria is caused by a specific poison. That there are cases of false membrane occurring after accidental causes, and with measles, small-pox, scarlet fever, or septicæmia, is true, but it is probable that they are simply co-incident cases of diphtheria, and such are considered by eminent authorities as caused by that poison. In those cases of membranous croup where cold has seemingly been the cause, it is not improbable that ordinary catarrhal inflammation or laryngitis has been excited,