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DIPHTHERIA, ITS CAUSE AND TREATMENT.*

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Mr. President and Gentlemen.—A very true definition of diphtheria is that given by Dr. J. C. Cameron, of Montreal, in his article on diphtheria. A local specific disease due to presence and action of bacilli, characterized by a deposit of pseudo-membrane at the site of infection, accompanied by constitutional disturbances and followed by nervous symptoms due to the absorption into the circulation of a virulent chemical agent (tox. albumen), which is produced by the local development of the bacilli.

It is often a very difficult matter to tell how the patient contracted the disease. It cannot always be said to be due to foul water, bad drainage, or defective plumbing. I have found it in the majority of cases to be due to contagion, direct or indirect. When called to see a case of diphtheria and find the premises in excellent condition, the plumbing and drainage standing the tests perfectly, we must look elsewhere for the cause. In one instance where the sanitation was perfect, I traced the cause to the presence of a young girl visiting the family, who had been an inmate of the diphtheria hospital, having been discharged from that institution for over three weeks previous to her visit. The disease spread all through that household, infecting six children and the father and mother. In another instance, after searching in vain for a cause, I learned that the milkman who supplied the family with milk, had just buried one child, a victim of diphtheria, and had another ill with the same disease. This milkman kept his cows on his premises, and I believe the milk was the medium of infection, for I had

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two other cases at the same time in different localities, where the same man supplied the milk, there being no other apparent cause. It seems quite reasonable to suppose that there are many cases due to the carelessness or ignorance of those who have the disease in their homes, who travel in the street-cars and frequent public places. A physician tells me of a case where a man, whose child died of diphtheria on a Sunday morning, had on that same morning attended church, remained to the after service, and would have gone to the Sunday school and perhaps evening service, had he not been requested to stay away. In many cases, children from infected homes attend school too soon after the patient's recovery. Indeed, a child suffering from the disease may attend school several days before detection, not complaining until he could no longer keep up. I have traced several cases to these sources of infection.

How can these existing evils be remedied? There exists a great deal of doubt as to the length of time a patient should be isolated after entire disappearance of the membrane. One authority says at least eight days, and this seems short enough when we know of cases being contracted from convalescents after that length of time.

Again, I believe the clothing of a patient often to be the means of carrying infection, through not being properly disinfected, on account of fear of destroying the fabric. It is a question whether the closing of schools during an epidemic of diphtheria limits the spread of the disease. It seems to me that a much better method would be to have the children examined carefully every morning by physicians, while the epidemic lasts. Children from infected homes should be prohibited from playing on the streets, and if sent away from home, as is often the case, should be thoroughly disinfected before being allowed to go. It is, comparatively, an easy matter to have the houses of the rich thoroughly disinfected, but not so in the case of the poor, who, in many instances, have large families and are not very cleanly. The houses of this latter class should be vacated while the process of disinfection is being carried on by the authorities. The burning of sulphur has been proved to be very inadequate, especially without the aid of steam. All fomites