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EARLY STREET CLEANING

Muddy streets, although a nuisance to pedestrians, are in one way beneficial to public health. The amount of street dust which must be breathed by the populace is greatly reduced when the streets are wet and muddy late in the winter. When the streets dry after the first spring thaws, and too early for the summer sprinkling carts and flushers to get into action, there is always a great increase in the amount of general sickness prevailing in cities.

Many physicians formerly attributed this prevalence of ill-health during early spring to the fact that one's constitution was likely to have been weakened by the strain of having withstood a whole winter of severe cold weather. This theory has been gradually abandoned and most physicians now attribute a large portion of the spring ailments to street dusts.

The dread power of street dusts is well known. Scores of the most virulent germs find their habitat in such dust. Out of forty-six inoculations into animals by Dr. Cornotti, with bacteria from city dust, thirty-two caused infectious diseases (*vide* "Bacteria in Daily Life," G. C. T. Frankland, London, 1903, p. 216).

B. tuberculosis, B. coli. comm., the bacterium pneumococcus, staphylococcus and streptococcus, pyogenus, diphtheria, anthrax and tetanus, have been recognized as permanent inhabitants of dust (*vide* "Quantitative Study of the Bacteria in City Dust," Winslow and Kligler, American Journal of Public Health, Vol. 2, New York, 1902, pp. 663-701; and "Street Dust as a Factor in Spreading Disease," Anders, Medical Record, Vol. 78, New York, 1910, pp. 563-6).

Tonsillitis, quinsy, laryngitis, pneumonia, influenza, tuberculosis, asthma, rheumatism, diarrhoea, skin disease, conjunctivitis, trauma of the cornea, nasal catarrh, frontal

sinus affection and middle ear disease from irritation of eustachian tubes,—all these lurk in the dust of the streets; chronic catarrhal colds and augmentation of the adenoid growths frequently are due to irritation and infection by street dust (*vide* "Dust Menace and Municipal Disease," Anders, Journal of the American Medical Association, Vol. 57, Chicago, 1911, pp. 1524-6).

Moreover, dust may, by predisposing an irritated condition of the respiratory organs, so lower the vitality of the mucosa that the development of any germ deposited thereon will be favored (*vide* "Dust and Its Danger to Children," La Fetra, Archives of Pediatrics, Vol. 23, New York, 1906, pp. 869-72).

A very alarming relation between dust and disease is revealed in the fact that experiments show dust-carried infection of infantile paralysis (*vide* "Experimental Poliomyelitis," Neustaedter and Thro, New York Medical Journal, Vol. 94, New York, 1911, pp. 613-5 and 813-20).

To sum up, suspicion points to street dust as one of the worst etiological mischief makers. City and town engineers who value the health of their public will begin the thorough sprinkling and flushing of streets at the earliest date permitted by the weather. There should not be the unnecessary delay that has occurred in past years in many Canadian municipalities.

ELECTRIFICATION OF RAILWAYS

Replying to a delegation which called upon the government at Ottawa last week urging the electrification of the Ontario lines of the Grand Trunk Railway, Premier Borden said in part: "I suppose it is a more or less technical question. I can see that we are in a different position to many countries and that we can succeed more quickly along such lines than in the United States, but you will agree that there is no use of our embarking on such proposals without seeing whether we are on the right track."

There can be no question but that Canada does occupy an enviable position so far as the electrification of her railroads is concerned, blessed as she is with a most valuable heritage of developed and undeveloped water powers. We should be in a position to tackle this problem with considerable confidence and excellent prospects of success. The day ought not to be far distant when Ontario's stores of electrical energy might be applied in channels where they are most needed.

Electrification of railways in Ontario would mean the releasing of vast quantities of coal which could be used more advantageously for heating purposes.

Speaking before the annual meeting of the American Institute of Electric Engineers a few days ago, E. W. Rice, Jr., president of that body, declared that ten per cent. of the ton mileage of the railways in the United States is taken up in moving coal, and as most of the coal is used by railways, they are stumbling over themselves by clinging to steam power. He furthermore stated that electrification of railways of the United States would save about a hundred million tons of coal annually.

If more of our railroads which are now operated by steam engines using coal as fuel, were driven by electrical power, hydraulically generated, it would mean that many of our water powers hitherto undeveloped would be harnessed for useful work. As every undeveloped water power is to all intents a burning coal mine (for coal of equivalent power would be saved if the water power were utilized), to that extent the exhaustion of the coal supply would be postponed.