

of observation among medical men that scarlet fever and diphtheria follow this annual distribution of ashes.

Again it has been observed that infectious diseases are apt to spring up in the vicinity of certain places where subsoil is much disturbed. The evidence goes to show that our present epidemic of diphtheria had its origin in this way. When paving Lockman Street last year the subsoil was encroached upon and carted upon several streets. Some of it, I am told, is heaped up in the City field, from which it is recarted upon the streets of the north end. Now this subsoil can hardly be anything else but dangerous. It forms part of the back yards, gardens and privies of fifty years ago, before Lockman Street was extended to North Street. Its very color is suggestive. In rainy weather it becomes soft and sticky and in dry weather foul and dusty. It makes our streets worse than any country roads. On strong complaint from teachers of our schools and others the Board asked the Board of Works to remove it or cover it up with broken stone, but the request was unheeded. Then our present epidemic of the virulent type of the diphtheria of fifty years ago broke out. It began on the streets soiled and spread from thence to one hundred of our streets. The total number of cases for the six months ending December, 1908, was 399. Of these, Lockman Street, the source, had 35; Brunswick St., which received the largest quantity of filth, had 30; Creighton Street, the next largest supply, 27; Maitland Street, 11; Gerrish, 9; North Park, 6; Agricola, 24; North, 8; making 216 cases on eleven of the streets soiled or in the next vicinity. This is more than half the cases, while less than the other half was thinly scattered over ninety of our streets. It is fair to infer from this that the execrable stuff from Lockman Street was the cause of the outbreak and of its continuance, in spite of the precautions taken against its spread by this Board. There was a source of infection outside of the houses on our streets, a resurrected virulent infection, and little wonder this Board could not cope with it.

I wish to urge that this Board communicate with the Board of Works in reference to those two dangers to the health of the City. If it be necessary to apply ashes the greatest care should be exercised that none but ashes from furnaces like the Cotton Factory and Sugar Refinery be used. The carting of the stuff from the City field upon our streets should be absolutely prohibited, and a liberal coating of broken stone should be given to those streets already soiled by it.

MURDOCH CHISHOLM, M. D., *Chairman.*

CITY ENGINEER'S OFFICE, April 30th, 1909.

His Worship the Mayor:

SIR,—I beg to report on the accompanying communications from the Chairman of the City Health Board.

In the report dated April 22nd, the Chairman objects to the use of ashes on sidewalks—first, because householders empty sweepings into the stove pan and not into the stove. If he knows that to be the practice he should lodge his complaint with the Health Board as it is being done in violation of the regulations of that Board, and apparently with their knowledge. It is the duty of the Works Committee to remove the ashes after they are placed on the street. Our employees are instructed not to remove any ashes containing any other matter, and whenever they find ashes mixed with anything else the barrel containing it is to be left where found.

His second objection is that householders spit in the ashes. Next to the fire the best spittoon for any householder who cannot afford a cuspidor is the ashes. While it is not desirable to encourage such a practice, it is also not desirable to alarm the public unnecessarily.

By the time the ashes are turned out of the pan into the barrel, turned out of the barrel into the cart and turned out of the cart on to the place of deposit the sputum is well covered with ashes and is not a menace to health as it is when deposited on the dry impervious pavements where it can dry up and be blown about. The ashes contain carbon, charcoal and recalcined lime, which are deoderants and disinfectants and take care of the matter complained of. The natural process of humification at once becomes

most active. The ashes are of a loose and absorbent nature and the more air admitted the better the result.

The third objection is that the ashes are carted away and recarted on the sidewalks and that scarlet fever and diphtheria follow this annual distribution of ashes. That objection is somewhat erroneous. The Works Department carts the ashes from the barrel in which it is put out direct to its permanent place of deposit, and neither makes or knows of any annual distribution. There is an annual distribution of ashes from back yards, made under the supervision of the Health Board, but it does not go on sidewalks and the Works Committee has nothing to do with it at all. If disease follows this distribution the Health Board should have applied the remedy long ago.

The ashes used by the Works Committee to fill up loose streets and sidewalks overtakes work in all parts of the City which could not otherwise be done with the money available, and the value of many properties has been increased, the condition of many streets improved and the request of many taxpayers granted. It would have cost thousands of dollars if paid for in cash. Let the good work go on, but let the Health Board enforce its regulation to keep foreign matter out of the ashes.

The Chairman charges that the present epidemic of diphtheria originated from the surface material carted from Lockman Street, some of which was deposited on Brunswick Street and was afterwards removed. It was removed not because it was dangerous, but because it was entirely unsuitable for road surface.

There was no impurity or disease germ in this material that cannot be found in the surface of every street in the City. The natural soil is primarily derived from the sub-soil, which may itself be regarded as the weathered portion of the underlying hard or soft strata. Science has taught us that the upper layers of the soil are teeming with forms of organic life whose hunger is inexhaustible and whose power of absorption is so active that anything that is even thrown on the surface of the ground speedily disappears, and whether animal or vegetable, becomes humified and so incorporated with the soil as to become actually indistinguishable from it. If then it were true, as the Chairman says, that the material carted from Lockman Street "formed part of the back yards, gardens and privies of fifty years ago," the whole soil layer in a good deal less than fifty years would have been reconstituted into harmless mould by the action of earth worms and micro-organisms. This material, however, never did form part of the back yards, gardens and privies. The upper layer was broken stone, the lower clean gravel and clay carted to Lockman Street to make a road thirty odd years ago. Instead of blaming the Works Committee for the unfortunate outbreak of disease on an erroneous guess, I would respectfully suggest that the gravity of such diseases demands a thorough, systematic and exhaustive investigation to determine their origin, and until that is done with every case reported it will, in my humble opinion, be a stern chase after typhoid, diphtheria, small pox and similar diseases.

The material stored in the City yard for street use is good, clean gravel or gravelly clay taken from excavations for new curbs, and is the only material that will stand the downpour on our steep streets except permanent work.

In the second report dated April 26th the Chairman accuses the Works Committee of using a night soil compost to grade a street in Smith's field. This field is private property, and what the Chairman refers to as a street is fenced in as private ground. The work is not being done by the Works Committee, and they have no jurisdiction over private property. The only City authority which has is the City Health Board.

F. W. W. DOANE, *City Engineer.*

Filed.

Read circular letter re subscription to London, England, "Canada."
Referred to Finance Committee for report.

Read circular letter Clement & Co., Montreal, re trade relations between Canada and France. Referred to Commercial Committee for report.

Read application of D. C. Gillis for position of Assistant City Assessor. Filed.

Alderman Wilson, Chairman Market Site Committee, reported progress in answer to Alderman Martin's question at last meeting.

QUESTIONS BY MEMBERS.

MOTIONS BY MEMBERS.

Alderman Bligh expressed regret that this is the last time Mayor Crosby would preside over the Council.

The following resolution is submitted:—

Resolved, that the Committee on Works report the cost of placing a granite curb and gutter on the south side of Quinpool Road between Windsor and Preston Streets.

Moved by Alderman McManus, seconded by Alderman Hoben, and passed.

Moved by Alderman Edwards, seconded by Alderman Rankine, that the Council do now adjourn.

His Worship the Mayor addressed the Council before putting the motion, making brief farewell remarks.

The motion is put and passed.

Council adjourns 4.05 o'clock.

L. J. Jones
W. J. Monaghan