from the old latrines, the soil between being of a light gravelly nature, and the dip being towards the well. (2) A spring in the Beaver Meadow, the water of which, after passing along in an open stream for some distance, is collected in a tank and conveyed thence through perforated logs to a large reservoir in the School building, whence it is distributed to the various parts of the establishment.

Analysis of Water.—The analysis of water was made by Professor Croft of Toronto; the follow- is a copy of his report:

Report on Three Waters from Lennoxville.

No. 1, water from cistern in school.
No. 2, water from well in quadrangle.
No. 3, water from Duffield's well.

It did not seem requisite or desirable to make an accurate quantitative analysis of each specimen, as the mineral constituents, unless present in abnormal quantities, could have little or no effect on their medicinal properties, and no chemical test can recognize typhoid germs. It appeared desirable to test the waters qualitatively as to their constitution, as to presence of ammonia or ammoniacal salts, chlorides, and organic matters, also for magnesia. By an accident from frost and other causes, the first analyses of No. 1 were untrustworthy, and had to be repeated.

Ammonia.—Each test was repeated two or three times so as to avoid error, and in cases of distillation, a quantity of pure water was first distilled to wash out all ammonia from the vessels, and in neither of the waters could ammonia be detected directly—*i.e.*, in the water as taken from the bottles. In first products of distillation—No. 1, faintest trace; No. 2, decided trace; No. 3, less decided trace. In no case very large; most so in No. 2.

Chlorine.—Probably as chloride of sodium—No. 1, scarcely perceptible trace; No. 2, decided, so much so as to induce rough determination, about 12 grains per gallon of chloride of sodium; No. 3, decided, but less than in No. 2.

Sodium.—Probably as chloride—No. 1, faint trace; No. 2, very decided; No. 3, decided.

Sulphuric Acid.—As probably sulphate of lime was present—No. 1, very faint trace; No. 2, decided, but not large; No. 3, about the same as No. 2.

Lime.—As for above.

Magnesia.—No. 1, scarcely perceptible; Nos. 2 and 3, rather more, about equal.

All waters gave a very slight precipitate on boiling, consisting of carbonates of lime and magnesia, with an infinitesimal trace of iron.

Solid contents.	5,000 grs.	70,000 grs. 1 gal.
No. 1, first experiment,	6.1	85.4
No. 2, "	6.2	86.8
No. 3, "	6.6	92.4

These experiments were repeated, and the numbers assigned represent the mean of several experiments. They (the residues) all became blackened very much on heating, Nos. 2 and 3 especially shewing presence of much organic matter. I have not been able to ascertain the exact quantities, but may say that 2 and 3 are very objectionable, from the presence of organic matter.

I have a letter from Dr. Baker Edwards, who analysed one of these waters and found only 8.4 grains in a gallon of 70,000 grains. That cannot have been one of the waters submitted to me, unless in the hurry of writing Dr. E. has placed the decimal point wrongly. The 8.4 corresponds closely with my 85.4. Can there be a mistake here?

I think the waters are all bad, as containing too much organic matter. I have had several cases of similar waters to examine in Yorkville and Toronto, in or from houses where sickness prevailed—one case bad typhoid. They all exhibited the same properties—chlorides in excess, magnesia, traces of ammonia, and organic matter. In one exceptional case I denounced the well water. There has been no illness to speak of in the School since the change.

Your obedient servant, HENRY H. CROFT.

P.S.—I have other confirmatory experiments going on, but send this as report on results obtained up to this time. The numbers obtained by analysis made in a hurry may not be absolutely correct; moreover, an error in 5,000 grains has to be multiplied or divided by 14 for 70,000.

H. H. C.

Suggestions with regard to the water supply:—

1.—That the well in the quadrangle be closed.
2.—That iron distributing pipes replace the wooden logs in the quadrangle.
3.—That, if possible, the large receiving tank be removed from its present position and located at the spring, and that the water be conveyed thence to the school reservoir through iron pipes.
4.—That the connection at present existing between the reservoir and the School drain (flush-pipe) be cut off, and that the reservoir be regularly cleaned and inspected.

Privies.—About the centre of the quadrangle the old latrine was situated; it was a square pit about 4 feet in depth, lined with unmortised planks, which permitted the liquid portion of the fœcal matters to ooze freely into the surrrounding soil. In August last the latrine was abolished, the contents were carted away, and the pit filled with earth and lime. A few feet from the latrine, between it and the well, we caused a pit to be dug a depth of six feet, and we found the loose gravelly soil to be impregnated at various depths with organic matter. To replace the latrine, closets were constructed behind the gymnasium, but not