

# THE Sanitary Review

SEWERAGE, SEWAGE DISPOSAL, WATER SUPPLY AND  
WATER PURIFICATION

## LINDSAY'S WATER SUPPLY AND OZONE PURIFICATION.

The Sanitary Review has consistently maintained a policy of caution in coming to any conclusion on the alleged efficiency of the Lindsay ozone plant.

In articles published in our issues of July 23rd, 1909, and August 27th, 1909, we felt compelled to strongly condemn the action of the town council in accepting the plant as satisfactory on the strength of a report made not by the Provincial Board of Health, but by an unofficial bacteriologist.

In no sense did we wish to make any imputation with reference to the bona fides or ability of this bacteriologist, but we felt that the gentleman had neither the time, opportunity nor means of thoroughly testing the plant, in order to provide a certificate of clearance on behalf of the contractors.

The position which we then took caused us to be somewhat roughly handled in communications from Mr. Bridge and in published matter in the local Lindsay papers; in fact, we were accused of prejudice and other like unworthy motives.

In view of the report which has been issued by the Ontario Government, and which is dealt with in this issue, we may be pardoned for now quoting some of our past statements and comparing them with the findings of the Provincial Board of Health as a justification of the policy we have maintained:—

### Sanitary Review Section of the Canadian Engineer.

July 23rd, 1909.

"A private report and analysis tests have been obtained apart from the Provincial Board of Health. These we publish in this issue. The town council evidently are content. We cannot enthuse over these results to the extent either of the town council or the local papers. As far as the town of Lindsay is concerned, we cannot yet accept its ozone treatment as satisfactory.

"From the above (viz., a percentage reduction based on the private analysis) it will be at once seen that filtration has proved a more efficient means of bacterial removal than ozone."

The total removal of bacteria is far below the percentage required either by mechanical or slow sand filtration viz., 97 and 99 per cent., respectively.

August 27th, 1909.

The local Lindsay papers have gone into hysterics over the wonderful work and efficiency of the plant. It is stated that most impure water is rendered pure by ozone to a degree never rendered by any other method. These conclusions have been advertised by other papers, with the result that an altogether false impression has got abroad with reference to this, the first installment of ozone water purification in Canada.

While we feel that the retort of "I told you so" has only an aggravating effect, and is of little practical value to those directly concerned, yet other municipalities should learn something from the history of this Lindsay transaction.

We have over and over again pointed out the folly of municipalities engaging the patent vendor as their expert adviser. May we again quote from these columns of our issue of October 22nd, 1909:—

"The business man comes along with a distribution of pamphlets and a vocabulary of ready-made science. His goods may or may not be the very best in the market. But who shall judge? Shall the municipality judge? The people who are not in a position to compare the goods with any others in the market just

### Provincial Board of Health Report.

Feb. 8th, 1910.

"I deem it necessary to draw attention to the absolute diversity of our results and those of the report on which the system was accepted by the town. Six months ago colon bacilli were destroyed by the ozone every time; during our test, not at all. The problem might well be worth investigating by the Water Commissioners of Lindsay.

"The filters remove 30 per cent. of the bacteria and the ozonizers 8 per cent."

The total bacterial removal by both filters and ozone gives a reduction of only 35.78 per cent.

The Government report does not hesitate to say that "the system is an absolute failure, as far as purifying the water is concerned."

"The system would achieve practically the same results with the ozonizers shut off or removed.

"From the analysis it will be seen that ozone has done absolutely nothing, not even removing the color in the slightest degree."