

TRUTH.

OLD SERIES—17TH YEAR.

TORONTO, ONT., SEPTEMBER 27, 1884.

NEW SERIES—VOL. IV. NO. 208

To Our Readers.

In our last issue we briefly directed our readers attention to our new Bible Competition. To-day we at somewhat more length, again draw our readers' attention to that announcement, the details of which will be found elsewhere. The competition which recently closed has been in many ways a disappointment to us, the result being by no means as satisfactory as we had expected, when the number and value of the prizes offered are taken into consideration. Nevertheless we are prepared to carry out all the promises contained in the announcement of our new competition. The list of prizes offered is the largest and most valuable we have yet advertised; the conditions of the competition are very simple; the questions to be answered are such as a fair acquaintance with the Scriptures will enable any one to answer, while the special offer to clubs is a peculiarly advantageous one. Again, the present competition offers a particularly favorable opportunity for new subscribers, and for those who are about to renew their subscriptions, as in the present issue we commence a new and exceedingly interesting story, and will in another week or two commence another one; so that those whose subscriptions have about run out, by renewing at once will have an opportunity of competing for one of our valuable prizes, will secure the new stories complete, and will receive TRUTH for another half year—a fact that all intending subscribers will do well to remember, as *there is nothing to pay for the privilege of competing*, the one dollar being simply a half year's subscription to Canada's most popular and most widely circulated family magazine, which of itself is well worth the subscription price, without the additional opportunity offered of possibly securing a valuable prize.

We exceedingly regret that, owing to an oversight the story which appeared in our columns some weeks ago, by Frank R. Stockton, entitled "The Wreck of the Thomas Hyke," was not duly credited to the *Century Magazine*, for which it was written and in which it originally appeared.

WHAT TRUTH SAYS.

Holiday makers are mostly home again, and are making things snug for the winter. The nights are getting too long and too cold for anything like enjoyment, either in a tent or a tabernacle. The island is coming to be looked upon as no place for enjoyment, and the comforts of city life are more and more appreciated. All as it ought to be. It passes our comprehension what people see in the wretched little hovels in which they enclose themselves for a couple of months or more. But there is no accounting for tastes. The tendency in our nation to savagery must be very strong, for ever and

anon the most sedate are fain to break away from the restraints of civilized life and revel in all the rough freedom of the original poor brother "Lo" of the American woods. The eloquently enthusiastic way in which so many talk of the free life of the bush or camp shows this. This civilization of ours has its advantage, no doubt. But we all like to get away from it every now and then so that we may revel in abominable clothes and miserable surroundings, may cook our own food and be and do just as we please, none claiming or desiring to make us either afraid or ashamed.

There is more truth than poetry in the criticism, from time to time appearing about Toronto water. The last one we have seen runs in something like the following terms:

Repeatedly during the summer an ordinary bedroom pitcher has yielded in my house from one to two tablespoonful of residue—organic matter—on standing from two to three days, and the water was very malodorous. Repeatedly it had smelled so strong of fish oil that, when coming out of the hot water pipes, it was hard to remain near the steam. Of course this was the case when the dead fish were to be found all over the lake's surface. When a druggist wishes to get the strength out of a medicinal herb, he either soaks, boils, or percolates. Now, all the garbage, all the sewerage that is cast in the lakes above Toronto is soaked and percolated, the essence of it is held in solution by the water, and the residuous matter by its own gravity sinks to the bottom. And this is the stuff the citizens of Toronto are daily drinking—in other words, large homeopathic doses of essence of sewerage, etc. Our dishes of food are boiled in this vile stuff, we drink it in our tea, our coffee, and we bathe our bodies with the compound. These are facts that no man can deny, and the sooner the situation is looked squarely in the face the better for this city.

There is not a bit of exaggeration in the above. How then can any one be surprised that our citizens should support such an extravagant number of doctors. The only wonder is that we don't support a great many more and die off a great deal faster.

The report of Dr. Stevenson MacAdam of Edinburgh, on the water system of Toronto, is so important to a large number of our readers that we give it in full.—

"In accordance with a request made to me by the Hon. Alex. Morris, I have much pleasure in stating the opinion I have arrived at from a general inspection of the water supply and the disposal of sewage in this city. Through the courtesy of the Mayor, who accompanied me, I had an opportunity of inspecting the pumping station for water supply and of observing the arrangements there, and have obtained information regarding the mode of discharge of sewage into the bay. I have also, accompanied by Mr. Morris, passed over to the Island and viewed the ground there.

CITY WATER.

The supply of the city is pumped from a well at the pumping station, and I caused the bottom of this well to be ex-

amined for any deposit which might be there. Much deposit was found, and a sample examined by me proved that the matter was largely composed of organic growths and organisms characteristic of putrescent organic matter of the nature of sewage. It was apparent that impurities of a gross character passed into the well, and I am clearly of the opinion that the water supply of a city or populous place should not be drawn from a well containing such putrefying deposits. On further inspection I found that the well was supplied with water flowing from an iron receiving tank situated on the wharf between the pumping station and the bay. Whilst it was apparent that the great part of the water entering the iron tank came from the pipe leading from the Island, I am inclined to consider that a smaller portion is obtained from the bay immediately alongside the wharf, through leakages in the ground surrounding the iron tank, and as the latter is admittedly not air tight, such leakage of water from the bay would readily pass into the tank and thence into the pumping well. As the bay in the vicinity was contaminated by sewage water discharged from the public sewers, it would follow that the leakage water would be impregnated with some impurities, and that such leakage into the well would fully account for the noxious matters found there. The pipe leading across the bay to the Island, is stated to be tight at present, but there can be no doubt that should leakages take place there a further amount of impurity might enter the water supply in this way.

TORONTO WATER SUSPICIOUSLY DANGEROUS.

I am therefore of the opinion that not only is the water supply of Toronto, at the present time, in an unsatisfactory condition and the quality suspiciously dangerous, but that it is liable, by increased sources of leakage, to become still less satisfactory in character. The full and proper remedy for such a state of matters is to place the pumping station on the island and force the water from the island through the pipes laid in the bay direct to the city. I understand from Mr. Vonables, the intelligent engineer in charge, that the present iron pipes in the bay would be capable of resisting the necessary pressure, but the Island wooden pipes would require to be replaced by iron pipes. The water would be taken, as at present, from the tank on the south side of the Island, and should first be passed through a properly constructed series of sand and gravel filters such as are now in use in Great Britain, and thereafter be pumped into the city. Such a plan would render it impossible for any of the sewage impurities in the bay to enter the city pipes or to be carried by the leakage or otherwise. The jetties arrangement and wells attached thereto should be in duplicate so as to ensure that each set could be periodically cleaned out.

THE CITY SEWAGE.

The present mode of the disposal of the sewage is entirely primitive, and independently of the pollution of the water supply, must be immediately dealt with. At present the bay is becoming greatly polluted, and the putrescent debris must evolve noxious gases and organisms to the serious impregnation of the atmosphere of the city. The continuance of the discharge of the sewage of the city along the foreshores should not therefore be allowed. The remedial work should include a main sewage some distance out of town, and the sewage should then be pumped up and distributed over land of a sandy and gravelly nature by the process of intermittent downward filtration,

whereby the sewage is deprived of its noxious elements, and the land can be utilized for the growth of crops. This system is in successful operation in various parts of Great Britain. Signed, Stevenson MacAdam, Ph. D., F.R.S., F.C.S., F.I.C., Professor of Chemistry, Surgeons' Hall, Edinburgh.

In this connection the following editorial item from a recent issue of the *New York Sun* is timely and interesting.—

Every little while we hear of the pollution of the water supply of some city. The latest case is that of Washington, which gets its water from the Potomac River. It is said that the carcasses of many hogs dying of cholera have been thrown into the river. It would be a matter of extreme difficulty to thoroughly protect the waters of so large a river as the Potomac, but cities which have the sources of their water supply comparatively close at hand seem to be hardly any more secure in this respect. Not long ago, for instance, the fact came to light that the Ridgewood Reservoir in Brooklyn had been used by disorderly persons as a swimming bath. Evidently a more complete and trustworthy system of guarding the water supply of our cities is needed. It is just as important that the water should be wholesome as that it should be abundant.

The Mowat demonstration was in every sense of the word, a success. The weather was propitious, the procession was representative and imposing in its proportions, while the dinner in the evening, was the crowning event of the day. Of course, some of the Tory papers had to get in some of their foolish sneers, but really in reference to everything connected with Mr. Mowat, the course of some of the leading Conservative papers has been so unlike what one would be led to expect from their oft-repeated claims to culture and true refinement, that sensible people have ceased to care for what they either think or say. Mr. Mowat richly deserved his triumph, and the sneers of disgruntled politicians, jaundiced with hatred and jealousy, instead of detracting in any degree from that triumph, added to it very considerably.

The Toronto Exhibition has this year been the best that has yet been. Even those most inclined to be jealous of Toronto, and therefore to underrate everything connected with the city, have had to acknowledge that it was a very fine show all round. There is a good deal of the circus about it we must acknowledge, but then the people have to be amused in some way. The monkey or the woolly horse has to be produced in one guise or another.

So it is now to be taken as beyond all reasonable doubt that the Alkali plains of the North West are all as fertile as fertile can be. So be it. We are glad to learn that such is the fact and that there is the greater likelihood of the whole country, big as it is, being one unbroken stretch of unexampled fertility. It may be good for the support of a hundred million of people. Who knows?