

pipe, and the polluted water of the aqueduct to be drawn into the city water supply? In addition to this I have had occasion before this to draw the attention of the public to the famous brewery creek, accumulating, in its course from the St. Louis dam to the Ottawa, in addition to the refuse from a slaughter house, a glue factory, a tannery, and the drainage of many large institutions in the neighborhood, and the surface drainage of some 1,500 people—the majority not noted for paying much attention to sanitary laws. In addition to these facts it is known that three cases of typhoid fever were treated by a city physician of repute in houses situated on the banks of this creek, in the month of August, or early in September, just before the outbreak in Ottawa, and that this creek discharges into the Ottawa by two outlets, one-half of a mile above, the other about 200 or 250 yards above the mouth of our water-supply pipe. In other years, during high water, and when the current flowed from the shore, and towards the Chaudière Falls, little of the Brewery Creek water reached the water main. This season not only has the volume of the Ottawa been diminished, but the direction of the current has been changed towards the shore by the dam which has lately been constructed at the head of the Chaudière, and which causes the creek water to skirt the Ontario shore, and flow directly past the mouth of our water-supply pipe. Therefore I consider it probable that the city water has been polluted by one or both of these causes. There have been three analyses, one stating that the water is pure, the others that it is impure. So far as I have heard, the typhoid germ has not been isolated, but I believe a system of filtration should be at once insisted on temporarily till the spring, when the pipe could be raised from the aqueduct, laid separately from it, and extended to Thompson's Bay beyond Mechanicsville. While it is not certain that filtration will remove germs of disease, it will in all likelihood render them less harmful by removing conditions in the water which render their propagation easy.

THE FEVER.

BY GEO. BAPTIE, M.A., M.D.

A Paper read before the Ottawa Medico-Chirurgical Society.

Mr. President and Gentlemen.—Any one who has paid the slightest attention to what he hears, and what he sees in the press, must be struck with the diversity of views entertained respecting the

cause of the fever prevalent in Ottawa, as well as to what the fever is. At different times the popular opinion was that it is malarial, followed by change to bad drains, and then to water as the probable cause of the sickness.

The term malaria is used in two different significations. More generally it is employed to denote the cause of intermittent and remittent fevers. There is now a tendency to make it cover more than this, to make it cover the fevers more or less intimately connected with decomposing organic matter in cities. Paludal malaria and civic malaria are convenient but imperfect designations respectively for these. What is the disease that has come upon us? Is it malarial? It is not malarial, it is argued, because,

1st. The conditions for production of malarial fever are wanting: there are not swamps, the high temperature et. necessary. Even if the suitable conditions of organic matter, heat and moisture are to be found, do we not require something more? *Bacillus malarie*; like produces like; no seed no crop. Who ever knew the decomposed potatoes, cabbages, apples, etc., in a farmer's cellar to produce malarial fever?

2nd. The history of the place is against the view that it is malarial. Malarial fevers have been practically unknown as a local disease.

3rd. Were the disease malarial, we would naturally expect a good deal of intermittent, but there has been none of this.

4th. It is not malarial because the fever was not checked by frost.

To these arguments those who hold the fever is malarial may reply that the conditions are possibly existent, for malarial fevers do occur under conditions widely different from those alleged as the conditions, e. g., malarial fevers often occur on the clearing of forests; on the breaking up of the surface, as did occur in the case of the dry plains of Kansas; even granitic and limestone rocks have been known to be malaria localities. It is then, as a matter of fact, difficult to say positively that the conditions are not existent here. It should not be forgotten that the beds of our streams have been greatly exposed. Enormous banks of sawdust lie not so very far from the city. While it is true the conditions here are not those which obtain in notoriously malarial localities, such as above the mouth and lower part of the Grand River, they are