

GOITRE OR ENLARGEMENT OF THE THYROID 7

of goitre very considerably. I am told that, at times of freshets (June), the Calgary water is very thick and dirty and is not drinkable and it is difficult to wash with it. When I was there it was pure and clear. The Mayor told me they were building a filtration plant, but want of money had prevented its completion.

"In the afternoon, I met the Health Committee of the Local Council of Women, presided over by Mrs. Edwards. The meeting lasted some time and many questions came up and were discussed. The great majority of the Committee agreed that goitre was very prevalent in Calgary, and they seemed much disturbed about it. Dr. Oakley, a lady practitioner, and the Medical Inspector for the schools, reported at the meeting that 25 per cent of the girls in the high school had goitre; a very small percentage occurred in the male pupils. Of course, the statistics of the high school, where older pupils attended, are most important, as goitre rarely attacks young children. Among 1,200 pupils of all ages there were 56 cases of goitre, so there is no doubt goitre is prevalent in this region.

"I assured the ladies that, beyond the deformity induced by it, they need fear no ill effects as predicted by some; that, for generations in the Province of Quebec (e. g., Three Rivers), goitre has been prevalent, and yet the people had not deteriorated. I also told them that the disease was due to an infection, most probably by an intestinal bacillus, some authorities attributing it to the *Bacillus Coli*; that the infection was no doubt conveyed through water, and that boiling the water would greatly lessen, if not wholly prevent, the disease. Also, if those already affected were treated with iodine internally and iodine ointment externally, and if, at the same time, all the water used for tea, coffee, and for drinking was boiled, the goitre, not being subject to fresh infection, would be reduced in size and would probably disappear.

"They seemed satisfied with the results of the interview, but still thought the Federal Government should intervene and insist on pure water. I, however, told them that this was a provincial matter, and they should appeal to their own Legislature.

"From what I could gather, the authorities do not wish it to be known that goitre is prevalent, and so do not discuss it, fearing that open discussion might interfere with the prosperity of the country. Of course, in many other parts of Canada goitre is prevalent, where there is little earth covering the rock, as at Sudbury and Byng Inlet, Ont., etc. In such places, the earth is not sufficient to disinfect the water passing through it. It is now well established that ordinary goitre (not exophthalmic) is caused by infected water, that is, it is caused by water infected with the excreta of man or animals suffering from goitre. Whether the organism is a specific bacillus or not, or whether it is due to the *Bacillus Coli*, is a vexed question. Animals are very subject to goitre, and it is common in dogs, horses, calves, sheep, etc. As these animal graze on the hills, their excreta would, in times of freshets, be washed into wells and rivers and thus contaminate them. Boiling the water is the most efficacious way of purifying it. Of course such chemicals as chloride of lime and filtration plants, etc., may be as good but not so easy to carry out.