

Numbers 1 and 2 in the above table give a very fair idea when contrasted with numbers 5 and 6, of the differences which exist between shallow and deep wells. The solids in the latter are much higher, and although chlorides are present even in large amount, they need not indicate sewage contamination, since their presence may be due to chlorides in the soil or in rock strata through which the water has passed. Albuminoid nitrogen should be low in these deep waters; that it happens to be still lower in amount in the shallow wells quoted indicates their freedom from sewage. Number 3 shews sewage contamination not only in its albuminoid nitrogen but in its traces of phosphates, and this is corroborated by its chlorine, for while 66 parts chlorine does not indicate anything wrong in No. 2, one-seventh part as much chlorine is a bad indication in No. 3, since its sewage origin is borne out by other features of the analysis. The free ammonia in No. 4 serves to indicate sewage, and the nitrates here shew past sewage contamination. Numbers 7 and 8, although deep wells, shew in many items of the analysis that sewage has found entrance to them, and they cannot be safe or desirable sources of domestic supply.

I had intended interpreting for you the results of analysis of Ottawa river water for some years past, so far as I have been able to collect statistics; but this would require at least another half hour, and it is now past ten o'clock. I must therefore defer this portion of the subject until some future opportunity. There remains also the important question of how, by artificial means, the quality of a natural water supply may be improved. This is in itself a subject large enough to occupy a whole evening in its treatment, and must therefore be left to be dealt with in the future.