solid compounds consist of magnesium and calcium sulphates and chlorides, with small quantities of carbonates of these metals, the latter (carbonates) being held in solution as the more soluble bicarbonates.

The water is but faintly alkaline to test papers. Experiment shows no volatile alkali to be present.

To the query as to whether "if condensed, would products be useful as a fertilizer?"—I must answer that as a direct fertilizer, salt is not considered to be of any value. Most plants differ from animals in not requiring salt as an essential constituent of their food. On certain soils, however, salt is beneficial to some extent as an indirect fertilizer, liberating lime and potash—essentials for plant growth. This, however, may be more economically brought about, in the majority of cases, by other compounds, *e. g.*, gypsum. Salt again is sometimes used to arrest rank growth in soils too rich in nitrogenous matter. To the second part of the question I would reply that as a source for obtaining common salt this water would not be of any commercial value.

With regard to the third question proposed, "could the salt be neutralized by any chemical substance?" my reply must again be in the negative. Salt is itself a neutral body; and being an exceedingly soluble one cannot by any chemical means be precipitated in order to render the water fit for drinking purposes.

The only method to obtain from this saline water a potable one would be by distillation—such as I suggested in my last report on saline water—the condensed product being free from all dissolved solid matter.

Respectfully submitted.

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I am now conducting a series of analyses with a view of ascertaining the relative qualities of certain wheats, and also, if possible, to find out what effect, if any, climatic influences, variety of soil, &c., have upon the constitution or composition of the same wheat. The results of these analyses will also show the comparative values of the Red Fyfe wheat, as grown in our North West, and the newly imported Ladoga (Russian) wheat as grown in Russia and the several Provinces of our Dominion.

All of which is respectfully submitted.

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