had carried out a series of pot experiments with corn, wheat and peas. The results showed clearly that this chemical proved most disastrous to vegetation. He therefore inferred that in many instances the sterile character of the soil was due in part, and in some instances, perhaps, wholly to the presence of magnesium sulphate (Epsom salts).

Elaborate pot experiments were then instituted with wheat, pea<sup>S</sup> and corn, to find out if the addition of (a) carbonate of lime and (b) lime to a soil containing magnesium sulphate would render this substance non-injurious and allow the plants to come to maturity. While the carbonate of lime proved beneficial, lime proved much more so. During the course of the experiments careful records were made at intervals of a week, and mathematical plottings of these were shown to the meeting. Photographs, also illustrating the growth of the plants in the treated and untreated soil, were exhibited. The chemistry underlying the changes induced in the alkaline soils by these remedial agents was explained. The value of lime in improving soils impregnated with magnesium sulphate was fully established by the scientific data here brought forward.—Toronto Empire.

(In our brief report of the proceedings of the Royal Society we were able only to refer to the papers read in section IV, and we therefore reproduce with much pleasure this abstract of the paper presented to Section III by our Delegate. Ed.)

## FLORA OTTAWAENSIS.

By James Fletcher, F.R.S.C.

The annotated list of the Flora of the Ottawa district which was begun three years ago in the Ottawa Naturalist and the completion of which was unavoidably delayed, first of all by illness of the writer and afterwards by press of official work, will be completed in this volume of the Naturalist. Members will please observe that the sheets issued with each number are unattached and that the pagination begins at page No. 78 in continuation of the part issued with the May number 1890. Some members will receive the forthcoming sheets who were not subscribers to the Club when the former parts were issued. They may perhaps be able, with a little enquiry, to procure the first 77 pages from some members not specially interested in Botany.