## REPORT ON THE BOTANIC GARDEN FOR 1896.

TO THE CORPORATION OF THE UNIVERSITY.

The past year has witnessed an increase of 5.4 per cent in the number of students deriving benefit from the advantages offered by the Botanic Garden. This has resulted in part from the natural growth of the classes in Arts, but in large part also from the great increase in the number of those who have elected Botany as an optional subject in the Third and Fourth Years. The immediate increase in numbers, which has followed upon the adoption of more liberal options in Natural Science subjects, and better provision for the prosecution of work in the higher branches of Botany, affords an excellent illustration of the demand for biological work, and the fact that students will be drawn to such studies in direct proportion to the facilities afforded for making them live subjects. In my last report, I drew attention to the important relations existing between the Garden as a source of supplies, and the Laboratory as a means of converting the material thus obtained into intellectual food. The experience of the past year has served to confirm the view that a properly equipped garden is an absolute essential to the conduct of efficient courses in Botany, especially where the function of investigation is joined to that of instruction, and any curtailment of the efficiency of the former must lead to a diminution in the strength of the latter as an important educational

During the past year the facilities afforded by the Garden have made it possible to extend the work of special investigation, and the following subjects have been dealt with:

- 1. A revision of the species of Picea occurring in North-eastern America. D. P. Penhallow.
- 2. Myeloxylon topekensis, N. S. A new species of Myeloxylon from the Carboniferous of Kansas. D. P. Penhallow.
- $_{\rm 3}.$  Contributions to the Pleistocene Flora of Canada. D. P. Penhallow.
- 4. The Generic characters of the North American Coniferae, based upon the structure of the stem. D. P. Penhallow.
- The Idioblasts of the Aroidae in relation to distribution and mechanical stress. In progress. Miss K. T. Lyman.
- 6. The Stomata of Seed-plants, in relation to distribution and special adaptation. In progress. Mr. W. H. Watters.

Our relations to kindred institutions continue on the same basis as heretofore, and exchanges have been made with the same institutions and publications as during the last year.

(Signed), D. P. PENHALLOW, Director.