BOTANICAL SOCIETY OF EDINBURGH.

November 8, 1855.—Professor Balfour, President, in the Chair.

The following papers were read :—

1. "On the *Batrachian Ranunculi* of Britain," by C. C. Babington, M.A., F.R.S. (See Annals, vol. xvi. p. 385.)

2. "Note on *Linaria sepium*, Allman," by C. C. Babington, M.A., F.R.S. (See Annals, vol. xvi. p. 449.)

Professor Allman remarked that he found some difficulty in allowing the plant to be a hybrid, as represented by Mr. Babington, but that, from a recent examination of specimens at Bandon, he believed it to be only a variety of *L. repens*.

3. "On the Influence of Last Winter on Trees and Shrubs at Aberdeen," by G. Dickie, M.D., Professor of Natural History, Queen's College, Belfast.

4. "Notice of the Flowering of the *Victoria regia* in the Royal Botanic Garden, Glasgow," by Mr. Peter Clarke, Curator of the Garden.

5. "On the Structure of *Victoria regia*, Lindl.," by Mr. George Lawson.

The lower surface of the *Victoria* leaf is somewhat peculiar. It exhibits no stomata, but is thickly clothed with flexuous hairs, consisting of cylindrical cells, and arising each from a small round basal cell, very distinct both from the other cells of the hair and those of the epidermis, which latter are filled with diffused colouring matter, mostly red, but some blue, and a few without colour. These hairs average about the $\frac{1}{55}$th part of an inch in length, by the $\frac{1}{490}$th of an inch in breadth. There are seen scattered over the surface, in addition to the hairs, numerous round cells, precisely similar to those which form the bases of the hairs; these apparently indicate non-developed hairs. The arrangement of these cells (taking together those which form the bases of hairs and those whose hairs are abortive) is so strikingly similar to the arrangement of the stomata on the opposite surface of the leaf, as to suggest the question whether these cells are not homologous with the stomata—are, in fact, the cells from which stomata would be evolved if they were produced. This idea is strengthened by the fact that a trace of chlorophyll is seen in these cells, while it is entirely absent in the ordinary epidermal cells, but present in well-defined globules in the cells of the true stomata. Whatever be the homological relationship between the hairs and the stomata, there can be no doubt that the cells to which I have alluded represent undeveloped hairs.

6. "Notice of some of the Contents of the Museum of Œconomic Botany in the Edinburgh Botanic Garden," by Professor Balfour.