

subject. Dies have been prepared by Thomas Moring, of London, from which a medal in bronze will be struck annually for this purpose.

WM. H. HOBBS.

TORREY BOTANICAL CLUB, MARCH 29, 1899.

THE first paper was by Francis E. Lloyd, on 'The Functions of the Suspensor,' and was illustrated by drawings and a series of microscopes exhibiting slides.

Mr. Lloyd described the structure of the suspensor typical of the genera *Galium*, *Asperula*, *Vaillantia*, etc., and showed that haustoria are formed which absorb food from the endosperm. The large basal cell of *Capsella* was shown also to possess a function quite similar, because, as the preparations showed, the basal cell destroys the tissue of the inner integument in its vicinity and thus becomes imbedded in it.

The second paper was by Mrs. E. G. Britton, on 'The Ferns of the Eastern United States,' illustrated by the stereopticon.

Mrs. Britton exhibited mounted specimens of all the rarer ferns of the Eastern States, many of them of her own collection, giving the range of each species. She also exhibited lantern slides made from photographs of these ferns taken as they grow. Those of the maiden-hair, hart's tongue and beech-fern were taken from the fernery in the New York Botanical Garden; five of them were views from the Catskill Mountains taken by Mr. Van Brunt; Mr. Hulst contributed one from Lake George, and Mr. Lorenz five from Willoughby Lake, Vt. Others were Adirondack views taken by Stoddard. Mrs. Britton stated that she would continue to fill in the omissions where she had not been able to obtain photographs, and hoped to complete her collection in the future. She expressed the hope that as the interest in ferns increases, the love of them would likewise grow, and that the rarer ones would not be exterminated by useless transplanting to locations where they will not survive. It was stated that thus far Rutland county, Vermont, shows the greatest number of ferns of any county in the Eastern States, having 42 species and 10 varieties. There are seldom more than 20 species in any locality, except where there is a great variety of soil and habitat, as at Jamesville, N. Y.,

where Professor Underwood has found 34 species. Long Island has 25 and Staten Island 23 species.

In further illustration, the Torrey Club collection of ferns and many sheets from the Columbia collection were exhibited, also a series of photographs from Professor Atkinson, showing the variations produced by cultivation of *Onoclea sensibilis*.

An exhibit to illustrate *Onoclea sensibilis* in the fossil state was also furnished by Dr. Hollick, being of special interest as the only living species which is actually found fossil.

Mr. William A. Lawrence, of Hartford, Conn., was introduced by Dr. Rusby, as one who had collected 34 species of ferns about Willoughby Lake, Vt. Mr. Lorenz described the lake and neighboring cliffs, with the illustration of lantern slides, and spoke of the hundreds of plants of *Woodsia glabella* flourishing there close together, fruiting at one inch or at six inches. In the sunshine it becomes more leathery, as if passing into *W. hyperborea*. Mr. Lorenz also finds *Aspidium spinulosum dilatatum* reverting there to the type of the species.

Dr. Rusby and Dr. A. R. Grout also described their visits to Willoughby Lake.

Mr. W. A. Clute exhibited several fronds of *Dryopteris simulata*, collected by him at Babylon, L. I., last summer, and pointed out a distinction from *D. Thelypteris* in the fact that each pinna of *D. simulata* is not of uniform breadth but broader near the middle. It fruits chiefly in the shade, *D. Thelypteris* in the sun.

Dr. Rusby spoke of the beauty of the ferns on the mountain slopes near Plainfield, N. J., and of the localities near there for *Asplenium ebenoides*, *Cystopteris fragilis* and *Cheilanthes lanuginosa*.

Mr. Clute remarked that he had collected 16 species of ferns within a mile of Fort Lee, and 59 species are now growing at the Botanic Garden.

EDWARD S. BURGESS,
Secretary.

ZOOLOGICAL CLUB, UNIVERSITY OF CHICAGO—
MEETINGS OF WINTER AND SPRING
QUARTERS, 1899.

Ovarian Structure in an Abnormal Pigeon.—
The bird in question was the offspring of a