

carpels, fruit and tissues. Dr. Rusby referred to the separation of *Saururus* from the Piperaceæ, and to Dr. Henry's investigations now in progress upon a *Saururus* in China.

3. The next feature of the evening was the exhibition, by Dr. Britton, of a large and interesting set of blue prints from tracings made from Mexican plants. The originals were sent by Mocino and Sesse to M. Alphonse de Candolle at Geneva, but these and the accompanying text remained unpublished. Recently the text has been issued by the Mexican Natural History Society. The elder de Candolle furnished a series of tracings to Dr. Gray, from which the blue prints exhibited have been made at the instance of Dr. J. N. Rose, of Washington, D. C. An index and preface to the blue-prints has been supplied by M. Casimir de Candolle.

4. The subject next following was that of those members of the Convolvulaceæ which form large fleshy roots, introduced by Dr. Rusby, who exhibited specimens of the roots of *Ipomœa pandurata* sent by Mr. C. R. Beadle, of Biltmore, N. C. Three fusiform roots reached from 3 to 4½ feet long, 3 to 5 inches thick, and also developed at least one foot of slender root above, below the surface of the ground. One of these was forked, suggesting its name of 'Man in-the-Ground.' Medicinally it is used as a purgative.

Dr. Rydberg referred to the thicker, shorter root of *Ipomœa leptophylla*, which has a sweet taste, and frequents hillsides, where its roots serve as a storehouse for moisture as well as for starch.

Dr. Rusby suggested that the resinous matter found in these roots may be primarily a waste product, but is perhaps useful to the plant as a means of preventing its being eaten by enemies.

5. The next communication was from Mrs. E. G. Britton, on 'A Hybrid Moss.' Mrs. Britton exhibited Contribution No. 72 from the Herbarium of Columbia reprinted from the *Bulletin* for February, 1895, showing plate 231 to illustrate a hybrid of *Aphanorhegma serratum* collected by Drummond near St. Louis, Missouri, in 1841, and stated that the same hybrid had been rediscovered by Mr. D. A. Burnett on December 12, 1896, near Bradford, Pennsyl-

vania, along the Erie Railroad, on a heap of ashes left by burning old ties, and that it was associated with *Bryum argenteum* and *Funaria hygrometrica*. As in the case of Drummond's specimens, the antheridial parent is unknown, but was probably *Physcomitrium turbinatum*; it scarcely seems possible that it could have been *Funaria*. The specimens agree in every way and show various degrees of heredity from each parent. On most of the plants typical immersed capsules of *Aphanorhegma* occur together with either one exserted, long-pedicelled capsule of *Physcomitrium* or with two smaller immersed capsules more closely related to *Physcomitrium* than to *Aphanorhegma*. As in Drummond's specimens, the apical lid with a clearly differentiated border, the shallow spore-sac, and especially the different cell-structure of the walls and the less developed spores, clearly distinguish the hybrid sporophytes from typical *Aphanorhegma*.

Discussion followed regarding hybrid ferns and respecting *Asplenium ebeneum* and *A. ebenoides*. In answer to questions by Dr. Rusby, Dr. Underwood said that where both species grow together in North Carolina he finds *A. ebenoides* growing beneath cliffs, but *A. ebeneum* in different situations about the edges of boulders, while the associated fern *Camptosorus* inhabits only the flat tops of the rocks.

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NEW BOOKS.

The Study of Man. ALFRED C. HADDON. New York, G. P. Putnam's Sons; London, Bliss, Sands & Co. 1898. Pp. xxv + 410. \$2.00.

Syllabus on Vertebrata. EDWARD D. COPE. With an introduction by HENRY F. OSBORN. Philadelphia, Published for the University of Pennsylvania. 1898. Pp. xxxv + 135.

Hand-Book of Nature Study. D. LANGE. New York and London, The Macmillan Company. 1898. Pp. xv + 329. \$1.00.

Nature Study in Elementary Schools. Reader: Myths, Stories, Poems. MRS. LUCY LANGDON WILLIAMS WILSON. New York and London, The Macmillan Company. 1898. Pp. 181. 35 cents.