

living in mud, the Aplacophora are not mud feeders. The loss of the foot and shell is probably accounted for by their habitat. All the known species are European, not a single form having been recorded from the coasts of the United States, although it is quite likely they exist there.

Papers under the following titles were presented for publication: 'Contributions to Tropical Herpetology,' by Robert Baird McLain; 'Critical Notes on a Collection of Reptiles from the Western Coast of the United States,' by Robert Baird McLain; 'The Eastern Reptiles in the Collection of the Museum of the Stanford University Zoological Department,' by Robert Baird McLain.

EDWARD J. NOLAN,
Recording Secretary.

TORREY BOTANICAL CLUB, MAY 25, 1898.

THE evening was devoted to discussion and exhibition of acaulescent purple violets, introduced by a paper on 'The Acaulescent Violets,' by Mr. C. L. Pollard, of Washington, D. C., read by Dr. Hollick. This paper, soon to be printed, was the result of field study of the last two years, mainly in the Middle States, from which States most of our original species-types were derived. Mr. Pollard now describes 18 species and 3 varieties. He remarked that for violet characters we must depend upon unremitting field work. Herbarium material is useless, except as fortified by previous familiarity with the appearance while growing. Large numbers of individuals must be studied and every feature of the environment must be noted. Careful attention must be given not only to habit, but to habitat, to texture of herbage, to color of the flowers, to position of the cleistogenes, to nervation, to shape and pubescence of leaves, and to the nature of the surrounding vegetation.

A series of mounted specimens illustrating this paper was exhibited by Dr. Britton, and a large number of fresh specimens were passed, the result of collections sent in by Miss Sanial and by Messrs. Rusby and Crawford, and by Drs. Rusby and Hulst.

Discussion of the Eastern, stemless violets followed, in which Dr. and Mrs. Britton, Dr.

Rusby, Mr. Bicknell and the Secretary participated.

Dr. Rusby referred to a very small and apparently unique violet collected by him at Franklin, N. J., some years since, distributed by him as *Viola cucullata cordifolia* of Gray, and remarkable because only about one inch high.

Mr. Howe, in behalf of Professor Lloyd, its discoverer, exhibited the original specimen of *V. MacCloskiei* Lloyd, from the State of Washington.

Mr. Bicknell spoke of the confluence of many surely distinct violet species.

Dr. Britton said that, while a number of violet species are clearly isolated in character, there is every gradation from these to the more critical species. The latter show all kinds of intermingling. The tendency to atavism, especially in the earlier, not maturely formed leaves, is very strong and often suggests the paternity of a species.

Dr. Britton announced that about 25 violet species are now growing at the botanic garden.

After much discussion of the characters on which Mr. Pollard's species rest, the Club was adjourned to the second Tuesday in October.

EDWARD S. BURGESS,
Secretary.

NEW BOOKS.

Vorlesungen über Theoretische Physik. H. VON HELMHOLTZ. Band I., Abtheilung 2 Vorlesungen über die Dynamik discreter Massenpunkte. Edited by OTTO KRIGAR MENZEL. Band III., Vorlesungen über die Mathematischen Principien der Akustik. Edited by ARTHUR KÖNIG and CARL RUNGE. Leipzig, J. A. Barth. 1898. Pp. x + 380 and x + 256.

Practical Plant Physiology. W. DETMER. Translated by S. A. MOOR from the second German edition. London, Swan Sonnenschein & Co., Ltd.; New York, The Macmillan Co. 1898. Pp. xix + 555. \$2.

Proceedings of the American Association for the Advancement of Science. Forty-sixth Meeting, held at Detroit, Mich., 1897. Salem, The Permanent Secretary. 1898. Pp. xxx + 499.