books received.


SCIENTIFIC JOURNALS AND ARTICLES.

The Botanical Gazette for April contains the following leading articles: 'A Conspectus of the Genus Lilium,' by F. A. Waugh, which brings together and organizes the widely scattered material; 'Some Appliances for Elementary Study of Plant Physiology,' by W. F. Ganong, in which are described, with figures, a temperature stage, a clino stat, a self-recording auxanometer, an osmometer, a respiration apparatus, a germination box, a transpiration device, the graduation of roots, tubes, etc., and a root-pressure gauge; 'Oogenesis in Pinus Laricio,' by Charles J. Chamberlain, a paper with plates, in which the following results are announced: The ventral canal cell occasionally develops as an egg; the chromatin of the egg nucleus takes the form of nucleoli which finally collect from all parts of the nucleus to a definite area near the center and there develop into a typical spirem; the chromatin of the two sexual nuclei is in the spirem stage at fusion; the fate of the spirem indicates that the kinoplasmic fibers arise through a transformation of the cytoplasmic reticulum; a continuation of 'The Ecological Relations of the Vegetation of the Sand Dunes of Lake Michigan,' by Henry C. Cowles, the present part, profusely illustrated, discussing the encroachment on preexisting plant societies and the capture of the dune-complex by vegetation. Under 'Briefe Articles' Julia W. Snow describes (with plate) the life history of a new Ulvella (U. Americana), and Bradley M. Davis discusses recent work on the life history of the Rhodophyceae. The number closes with the usual reviews, notes for students and news.

American Chemical Journal, April, 1899. 'On the Hydrolysis of Acid Amides;' by I. Remsen and E. E. Reid. The rate of hydrolysis of a large number of acid amides was compared and certain groups or positions of groups were found to exercise a marked influence on the reaction. In general the results agree with those obtained in the study of the rate of formation of ethereal salts. Ortho groups were found to exert a very marked 'protective' influence in many cases. 'Aliphatic Sulphonic Acids;' by E. P. Kohler. The author describes the preparation and reaction of (1) brome-