bibliography of paleobotany. The first volume contains the titles of 1908, and is divided into two sections: (1) an author list (pp. 17), which includes 309 entries; and (2) a subject list (pp. 200), by which one may find at once any plant referred to. The number of titles is increased by the fact that the list includes many papers on living forms which are related in some way to the interpretation of paleobotanical material. In these days, when paleobotany is becoming such a necessary part of morphology, such a volume has become indispensable.—J. M. C.

A revision of the genus Eucalyptus.—The title-page and index received recently completes the first volume of A critical revision of the genus Eucalyptus by J. H. Maiden.10 In this volume the author treats 40 species, giving detailed descriptions, synonymy, distribution, and much supplementary information; these species and their known varieties and forms are illustrated by 48 admirable plates. The work is an exhaustive and authoritative treatment of this highly interesting and economically important group of plants, and it is a pleasure to note that it is being continued; the first part of the second volume, containing nine species and four plates, has already been issued.—J. M. Greenman.

Illinois State Academy of Science.—The third volume (1910) of Transactions contains the following botanical papers: The vegetational history of a blow-out (abstract), by H. A. Gleason; Preliminary account of the forest successions on Isle Royale, Lake Superior (abstract), by W. S. Cooper; The forest associations of northwestern Illinois, by H. S. Peepoon.—J. M. C.

NOTES FOR STUDENTS

Plant diseases.—Bancroft11 has studied the life history of Cladosporium herbarum and finds that this fungus, known to be common on dead leaves, is connected with a parasitic stage which from its fructification would be classed in the form genus Hormodendron. The Hormodendron form makes holes in the leaves of many plants, among which are cucumber, melon, and cabbage. It is mentioned as epidemic in cucumber leaves. The holes are said not to be formed by the drying and falling out of areas of tissues, as in leaf-spot diseases. In this case the perforations occur from the first and increase in size, often running together so as to form large irregular holes. The margins are surrounded by a narrow line of dead brownish tissue. From the tissues surrounding the holes conidiophores of Hormodendron appear and produce branched chains of conidia. In cultures from these chains, conidia of Hormoden
dron were at first produced, but as the cultures became older only those of Cladosporium were formed.