

tion found that *Oospora verticilloides* was parasitic on corn. Deckenbach's work was published in Russian journals from 1896 to 1899, and after Tiraboschi's paper was published, Deckenbach reviewed his original work in *Centr. Bakt.*, 1 Abt. Originale, 45:507-512. 1907.

It is probable that this fungus has been recorded under other generic names by some writers. *Cephalosporium sacchari*, described by Butler as a sugar cane parasite in India, accords very well with our fungus, except that the conidia in chains were not noted by him. The distinctions between *Cephalosporium*, *Acrostalagmus*, *Verticillium* and similar genera are slight, and as the chains of spores of our fungus are not always easily found, this corn parasite may sometimes have been classed in one of these genera. The writers find, however, that the conidia are produced in two different ways: at first they are aggregated in small droplets at the ends of the short, sometimes verticillate, lateral branches of the erect fertile hyphæ, and later produced in long chains on the ends of the upper branches. In older cultures septate spores are occasionally found and if a *Fusarium* stage should develop our fungus would have to be referred to Sheldon's *Fusarium moniliforme* which would then better be called *Fusarium verticilloides*.

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MARYLAND AGRICULTURAL EXPERIMENT
STATION

SCIENTIFIC BOOKS

Orthoptera of Northeastern America with Special Reference to the Faunas of Indiana and Florida. By W. S. BLATCHLEY. May, 1920. Indianapolis: The Nature Publishing Co.; 8vo, 784 pages, 246 text figures and 7 plates.

This work comprises a very full consideration of the 353 species and 58 varieties of Orthoptera recorded from the region covered, and is the most comprehensive treatise on this group of insects so far published in America. While prepared more especially for the tyro, this volume contains a wealth of

assembled information of undoubted value to professional workers. As clearly set forth on pages 5 to 7 of the introduction, this work portrays the individual ideas of the author as to the systematic value of taxonomic characters used in classification. The conclusions reached, while not always in accord with recent usage, appear to be generally sound.

The biology and anatomy of the Orthoptera are treated at some length and the parasites and other enemies of the group are discussed. Economic questions are covered and the collection and preservation of specimens fully treated. The systematic portion includes dichotomous keys to suborders, families, genera and species. The derivation of generic names is given when known and many species are figured. The illustrations are mostly taken from previously published works, but the figures are well selected for the purpose of the present manual. Under each species is a description followed by notes on synonymy, distribution, habits, etc. Citations to literature are made by reference to a chronologically arranged author's bibliography. A glossary of terms used is given and there are two indices, one of synonyms with generic assignment and one of genera and species as here treated.

There is in general little to criticize in this very admirable treatise, though a critical review written by any specialist would probably point out a number of details considered open to special criticism. As is inevitable with a volume of this size a number of typographical and other errors occur. But on the whole it is a carefully prepared work, and one which will be indispensable to all students and collectors of these insects.

A. N. CAUDELL

BUREAU OF ENTOMOLOGY,
U. S. DEPT. OF AGRICULTURE

Manual of the Orthoptera of New England, including Locusts, Grasshoppers, Crickets, and their allies. By ALBERT P. MORSE. April, 1920. *Proc. Bost. Soc. Nat. Hist.*, Vol. XXXV., p. 197-556, text-figures 1-99 and plates X-XXIX.

Bearing a date a month earlier than the above work by Blatchley, but received nearly a month later, comes this volume, a magnificent treatise on the orthopterous insects of New England. An introduction to the literature of New England Orthoptera is given and the anatomy and biology of this group of insects are discussed at some length. The distribution of the species within the region covered is considered and there are several pages devoted to a consideration of the economic relations of the Order, including discussions of parasites and other enemies. Collecting and preserving are fully treated and there are keys to genera and species and higher groups. Under each family are notes on habits, etc., and under each species are references to the more important literature on the species and its synonyms. There are also notes on occurrence and, usually, brief descriptions. One hundred and thirty-two species are recorded, sixteen of which are considered adventive. There is no bibliography of works cited. The structural details of a large proportion of the forms treated are figured, and many are more fully illustrated, some in colors. There are also a number of reproduced photographs showing certain characteristic habitats of Orthoptera. Three colored plates and a few other illustrations are original, but most of the figures are reproduced from previously published works. An accented list of scientific names, a glossary, and an index conclude this most excellent manual.

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SPECIAL ARTICLES

A STAND FOR THE BARBOUR MICRODISSECTION APPARATUS

THE following is a description of a stand devised by the writer and Mr. F. H. J. Newton, mechanician at Wesleyan University, for use with the Barbour microdissection apparatus. The dissecting apparatus was also made by Mr. Newton, who reproduced with

slight modifications, in part suggested by Dr. Robert Chambers, the two-needle model formerly made in the Fowler shops of the University of Kansas.

The principal advantage of the stand as previously stated by Dr. Chambers¹ is that the dissecting apparatus is attached to a shelf independent of the microscope and consequently the latter may be shifted to various positions with reference to the dissecting apparatus. Also another microscope or binocular microscope may readily be substituted without the necessity of the assistance of a machinist to construct a shelf on each microscope used.

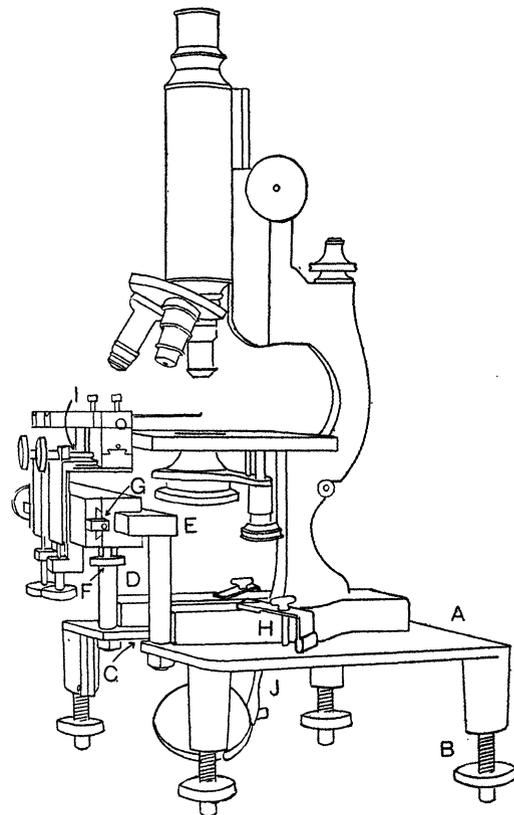


FIG. 1.

The drawing here shown omits for simplicity certain details of the dissecting apparatus as it has been figured elsewhere.¹ The thumb screw on the right side which is at

¹ Chambers, R., *Biological Bulletin*, Vol. 34, 1918.