WELL RECORDS SOUGHT

THE writer is making a mineralogical and chemical study of the saline "black waters" of western New York State. These waters are connate in the Niagara (Silurian) limestone. For the past several months he has been collecting well records but is only interested in those wells actually reporting black water when the Niagara limestone was contacted.

In an effort to obtain as many well records from western New York State as possible, he is asking all those who might have such records in their files to forward them to the writer, care of the Buffalo Museum of Science. Receipt of same will be greatly appreciated. Exact location of the well, the surface elevation and depth at which the black water was encountered are the only data that need be given.

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NEW YORK

SCIENTIFIC BOOKS

SOME NEW BOTANICAL TEXT-BOOKS

The Plant Kingdom: A Text-book of General Botany. By WILLIAM H. BROWN. ix + 869 pp. 1,040 figs. Ginn and Company, Boston. 1935. $3.50.

THE old order is slowly changing in botanical texts, yielding place to new. This is happily reflected in the volume by Brown. While the mold in which it is cast is essentially similar to that of previous works on the subject, this book has certain distinct and outstanding merits. In the first place, modern discoveries are given due consideration. For example, photoperiodism, growth-regulating hormones and recent suggestions with regard to water movement are succinctly discussed. In dealing with heredity, the usual ratios in the four-o'clock and the pea are explained; but in addition the inheritance of sex in plants and of color characters in corn and wheat is also described.

The morphological treatment afforded the organs of the plant is unusually complete, both in the scope of the descriptive matter and in the abundance of accurate and artistic illustrations. Throughout the book the illustrations are excellent, and, in the first part especially, nearly all are original—a very refreshing phenomenon. The chapter on plant geography, and the earlier chapters generally, serve as reminders that there are plants in the tropics, though the time-honored —and somewhat time-worn—representatives of higher latitudes are by no means neglected.

This is a large book, and the range of material taken up in most of the groups—the algae and fungi, for instance—is much greater than usual. And here again the modern work is given consideration.

A novel feature is the adequate discussion allotted to certain fossils that are now coming to be regarded as links in the chain of evolution. Thus among the lower Pteridophyta, the Psilophytales, including *Rhynia, Hornea, Psilophyton* and *Asteroxylon,* are amply treated; among the higher forms the Calamitaceae and Sphenophyllaceae and *Lepidodendron* and *Sigillaria* are considered. Similarly, among the Spermatophyta the Cycadofilicales and the very important *Cycadeoidea, Williamsonia* and *Williamsoniella* are taken up in some detail.

One might desire, in a book of this size, a better indication of the orders, families and interrelationships of the Angiosperms—a feature that is largely omitted.

The style is simple, direct and easy to follow throughout, and the manner of presentation easily understandable. This book is a distinct contribution in its thoroughness and completeness.

A Textbook of General Botany. By GILBERT M. SMITH, JAMES B. OVERTON, EDWARD M. GILBERT, ROLLIN H. DENNISTON, GEORGE S. BRYAN and CHARLES E. ALLEN. x + 574 pp. 429 figs. 3d edition. The Macmillan Company, New York. 1935. $3.50.

THE third edition of the Wisconsin text is larger than many other recent botanical texts, for two reasons: The discussions go into considerable detail, and certain topics omitted or barely mentioned in other books are included. The usual material is discussed in a very thorough fashion. In the chapter on "Inheritance and Variation," for example, the rôle of chromosomes in heredity, characters and genes, linkage and crossing over and their physical basis, the kinds of variations in plants, polyploid series and other variations in chromosome numbers, and chromosome fragmentation are all rather carefully considered. Similarly, in the chapter on "Floral Types and the Families of Angiosperms," nineteen families are characterized and illustrated.

Among the less usual topics included is "The Geographic Distribution of Plants in North America." Tundra, forests, grasslands and deserts are described. The forest types are taken up in some detail.

The subject of "The Economic Significance of Plants" is reviewed under various topics, such as the plant parts used commercially, the geographical distribution of crop plants, medicinal plants, forestry, weeds and plant diseases. It is evident that this text treats of numerous subjects that are beyond the scope of most books on general botany.

The book is conservative. Recent work is not neglected; it is in many cases almost unnoticeably incorporated in the general body of knowledge presented;