leaders of the period set out to introduce certain other lines of botany, phases of the "new botany," as it were. They began to teach vegetable physiology, mycology, phytopathology and phytogeography. Laboratories for the study of botany were established in widely scattered institutions. The astounding development that has marked these newer interests since 1900 is a fitting tribute to the reliability of the philosophy and vision of Gray and his small band of intimate coworkers. Rodgers' book is a lively assemblage of fragments, sometimes grave and sad, sometimes gay but always serious, from the intense careers of the men who dedicated their lives to the problems of that particular period in the development of science in America.

The author mostly treats of taxonomic surveys and explorations in the South and in the wide-open West. Some attention is also given to botanical expeditions in Canada, Mexico, Central America and South America during the same time. The creation of and the expansion of botanical laboratories, agricultural experimentation and progress in North American paleobotany are treated as among the other more tangible contributions of the group of men that were bound together under the magnetic influence of Dr. Gray. The group includes, besides Gray, the names of Torrey, Parry, Porter, Lesquereux, Engelmann, Chapman, Watson, Farlow, Goodale, Macoun, Pringle, E. L. Greene, Britton, Beal, Coulter, Bessey, Trelease, Vasey, Burrill and several others including the somewhat younger L. H. Bailey, who is still living.

The book is attractively published. The difficulties of printing the numerous quotations (in small type) from correspondence and the free use of footnotes for bibliographical references and other purposes have been very well handled. The only illustrations in the book are excellent reproductions of photographs of Asa Gray, Leo Lesquereux and George Engelmann. The value of the book would have been greatly enhanced if a larger selection of portraits had been chosen to grace its pages. The present generation of botanists as well as those to come would value the work much more if it included a greater use of such distinctive features.

The reading of "American Botany 1873–1892" will contribute hours of genuine pleasure to the comparatively few "old timers" who are still among us. The book is an early "must do" on the desks of every broad-minded younger (20 to 60) botanist in this country and beyond the seas.

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AERIAL SURVEYING

Essentials of Aerial Surveying and Photo Interpretation. By TALBERT ABRAMS. 289 pages. McGraw-Hill Book Company, New York, N. Y. $3.00.

THE various lectures and demonstrations given by the staff of the Abrams School of Aerial Surveying and Photo Interpretation are combined and edited in this book, and equipment developed by the school is illustrated. Training in the use of such equipment must supplement a study of theory if one is to become expert in this field. Those who have received such training will find this publication a useful handbook, yet it is so simply, clearly and concisely written that the casual reader desiring a general understanding of the subject will find it interesting reading.

The whole field of aerial photography, map making and map reading is covered, starting with simple subjects and progressing to more involved ones. Background material is covered first: use of the slide rule, ratio and proportion, logarithms, map projections and topographical drafting. Next comes the making and developing of aerial photographs and their interpretation. The more advanced section follows with such subjects as stereo plotting, topographic relief models, aerial mosaics and world charting. Finally, a glossary of terms is provided for ready reference.

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SPECIAL ARTICLES

NODULAR POLYMYOSITIS IN RHEUMATOID ARTHRITIS[1]

SINCE the fall of 1938 we have carried on a restudy of the pathology of rheumatoid arthritis. Because of the frequency of physical signs suggesting nerve involvement (trophic changes, hyperreflexia and muscle atrophy), and because a search of the literature revealed that the nervous system was singularly neglected in previous studies, special attention was focussed on an investigation of the nervous system.

In previous reports[2, 3] the presence of a specific

[1] This work was done under grants from the National Foundation of Rochester, Michigan, and the Children's Fund of Michigan. We wish to express our thanks to Drs. Charley Smyth and S. E. Gould of Eloise Hospital, for the use of material from the amputated legs and two biopsies. Additional biopsies were from the Department of Internal Medicine and Department of Pathology at Harper Hospital. These findings were demonstrated in May, 1944, at the annual meeting of the American Rheumatism Association and at a meeting of the Wayne County Medical Society in December, 1944.