

essentially aquatic, they occur wherever there is moisture. Commencing from one's own doorstep, they may be found in almost every damp nook and crevice, savanna and marsh, pool and ditch, pond and lake, sea and ocean, and from the greatest depths of the latter to the snow-line of mountains. By far the greater proportion are marine, and their tiny shells enter abundantly into the composition of the ocean mud and abound in the sands of every ocean shore. They appear to have been the first representatives of animal life on earth; and if there is any truth in the theory of evolution, they represent our own remotest ancestors. Having existed for ages, their remains have largely contributed to the formation of the marine sedimentary rocks.

The particular Rhizopods which form the subjects of the present work are those usually designated as the 'Fresh-water Rhizopods', living mainly in comparatively still fresh waters, in the mud of bogs, among algae and mosses, and even on the ground in damp, shaded places. My investigations were commenced four years ago, and have been continued during that time, in intervals of leisure from teaching and ordinary business pursuits, until last summer, when I began the preparation of my report for publication. In the study of the Rhizopods, my attention has been more particularly directed to the discovery and determination of the various forms occurring in this country, rather than to the elaboration of details of structure, habits, modes of development, and other matters pertaining to their history, though these have not been entirely neglected. In the latter respects, my researches fall short of those of some of the able naturalists of England and Germany:—Wallich, Carter, and Archer of the former, and Hertwig and Lesser, Greeff, Cienkowski, and Schulze of the latter country.

The illustrations accompanying the work, done in chromo-lithography, are not equal in execution to my desire, though they represent the characteristic appearance of the subjects in all cases, I believe, sufficiently well to enable the student to recognize these when found. The original drawings, made by myself, I think may be fairly viewed as approximating accuracy, at least so far as relates to the outlines, which have invariably been drawn to a scale of measurements, so as to preserve the proportions of all parts. Faults in perspective and other qualities are partially due to my own want of ability as an artist, and partially to the difficulty of correctly interpreting the views of objects as ordinarily seen through the microscope. Many