

of the illustrations exhibit various degrees of imperfection in some of the details, due to exaggeration of defects in the original drawings, which the artists, without any knowledge of the subjects, have attempted closely to imitate. It has long been a matter of regret to me that I have not been able to secure the services of accomplished artists, educated for the special purpose to give us faithful and beautiful representations of natural-history subjects, such as we so frequently see in the scientific periodicals and other works especially of Germany and France.

I think it worth while to embrace the opportunity of informing students that microscopic observations, such as those which form the basis of the present work, do not require elaborate and high-priced instruments. Such a microscope as is made by Zentmayer of Philadelphia, Beck of London, or Hartnack of Paris, and sold at prices ranging from \$50 to \$100, answers all ordinary purposes. The instrument should be furnished with two objective powers, of which the higher should be at least $\frac{1}{4}$ th or $\frac{1}{5}$ th of an inch focus. A still higher power being occasionally required, I have found an $\frac{1}{8}$ th or $\frac{1}{10}$ th objective of great service. I have now in use a little instrument of Beck, called the Economic Microscope, with 1-inch and $\frac{1}{4}$ -inch object-glasses and two eye-pieces, sold by W. H. Walmsley, No. 921 Chestnut street, Philadelphia, for \$50. An important addition to the instrument, for measuring, is a micrometer, divided into fractions of a millimetre, which may be purchased for a couple of dollars.

I give the above statement, not with any disposition to detract from the value of the various magnificent microscopes so much in vogue, but with the object of dispelling a common impression widely prevalent, at least among those with whom I habitually come into contact, that the kind of work such as I now put forth can be done only with the help of elaborate and expensive instruments.

In aid of my researches among the Rhizopods of the Rocky Mountain Region I acknowledge the services of my friend Dr. J. Van A. Carter, formerly of Fort Bridger, now of Evanston, Wyoming Territory. It was not only under his hospitable roof that I was enabled to pursue my investigations, but he conducted my expeditions into the Uinta Mountains and other places to collect materials, and withal defrayed the expenses of our trips. Dr. Carter, in his appreciation of scientific matters, has been of eminent service to geologists and other naturalists visiting his region of country.