

CHAPTER VI.

WHAT MAY BE LEARNED FROM EOZOON.

THE microscope has long been a recognised and valued aid of the geological observer, and is perhaps now in danger of being somewhat overrated by enthusiastic specialists. To the present writer its use is no novelty. When, as a very young geologist, collecting fossil plants in the coal fields of Nova Scotia, I obtained access to the then recently published work of Witham on the "Internal Structure of Fossil Vegetables."¹ Fired by the desire to learn something of the structure of the blocks of fossil wood in my collection, I at once procured a microscope of what would now be considered a very imperfect kind, and proceeded to make attempts to slice and examine my specimens, and was filled with joy when these old blackened stems for the first time revealed to me their wonderful structures. At the same time I extended my studies to every minute form of life that could be obtained from the sea or fresh waters. A few years later (in 1841), when a student in Edinburgh, I made the acquaintance of Mr. Sanderson of that city, who had worked for Nicol and Witham in the preparation of specimens, and learnt the modes which he had employed. Since that time I have been accustomed to subject every rock, earth or fossil which came under my notice to microscopic scrutiny, not as a mere specialist in that mode of observation, or with the parade of methods and details now customary, but with the view of obtaining valuable facts bear-

¹ Edinburgh, 1833.