

myself, this was scarcely necessary; but in view of what I have just stated, it may be that all he can do will be required to rescue from total ruin the results of our labors.

An illustration of a different character is afforded by the controversy now raging with respect to the so-called fucoids of the ancient rocks. At one time the group of fucoids or algae constituted a general place of refuge for all sorts of unintelligible forms and markings; graptolites, worm-trails, crustacean tracks, shrinkage-cracks, and above all rill-markings forming a heterogeneous group of fucoidal remains distinguished by generic and specific names. To these were also added some true land plants, badly preserved or exhibiting structures not well understood by botanists. Such a group was sure to be eventually dismembered. The writer has himself done something toward this,⁸ but Professor Nathorst has done still more,⁹ and now some intelligible explanation can be given of many of these forms. Quite recently, however, the Count de Saporta, in an elaborate illustrated memoir¹⁰ has come to the defence of the fucoids, more especially against the destructive experiments of Nathorst, and would carry back into the vegetable kingdom many things which would seem to be mere trails of animals. While writing this address, I have received from Professor Crié of Rennes, a paper in which he not only supports the algal nature of *Rusichnites*, *Arthrichnites* and many other supposed fucoids, but claims for the vegetable kingdom even *Receptaculites* and *Archaeocyathus*. It is not to be denied that some of the facts which he cites respecting the structure of the *Siphonites* and of certain modern encrusting *Algae* are very suggestive, though I cannot agree with his conclusions. My own experience has convinced me that, while non-botanical geologists are prone to mistake all kinds of markings for plants, even good botanists, when not familiar with the chemical and mechanical conditions of fossilization, and with the present phenomena of tidal shores, are quite as easily misled, though they are very prone on the other hand to regard land plants of some complexity, when badly preserved, as mere algae. In these circumstances it is very difficult to secure any consensus, and the truth is only to be found by careful observation of competent men.

⁸ Footprints and Impressions on Carboniferous Rocks, Am. Jour. of Science, 1873.

⁹ Royal Swedish Academy, Stockholm, 1881.

¹⁰ A propos des Algues fossiles, Paris, 1883.

One tr
spised
would

male d

It w
to that
great
suppos
cuss th
hosts
hope o
logica
face o
avoidi

No
chang
and t
which
has co
prece
vail
which
frages
These
necti
eated
of la
and
subsc
one.
other
the s
(1) t
since
cert
(2)
of t
to b
tren
cau