

acteristics of water and carbon dioxide and of the compounds of carbon, hydrogen, and oxygen favorable to a mechanism which must be physically, chemically, and physiologically complex, which must be itself well regulated in a well-regulated environment, and which must carry on an active exchange of matter and energy with that environment?

The first step in seeking a solution must be to review the data of physics and chemistry which describe the properties of water and carbonic acid, having due regard to their meteorological significance. Such data of the highest accuracy exist in great profusion, for almost every conceivable property of these substances has been studied with patient care. Next, the properties of the compounds of carbon, hydrogen, and oxygen must be considered, and some of the characteristics of the chemical reactions into which they enter must be discussed. For this examination the unparalleled development of the science of organic chemistry provides ample material. All of these things must be scrutinized quantitatively as well as qualitatively, and here again there is no lack of necessary information.

Immediately one advantage of the method here proposed becomes evident. We can deal with the familiar abstractions of physical