

environment are important. It is certainly impossible to imagine a medium more rich and varied in elementary constituents than sea water, unless it be sea water with still other substances added to it. But, in the first place, there are few absent elements which might be added, and, in the second place, the addition of other substances would be likely to cause the escape of bodies which are present. At all events, the ocean is certainly more favorable in these three respects than if it were anything else that could occur in the course of nature. Almost ideally mobile, rich, and varied, the sea is an almost perfect source of supply for a complex mechanism. To be sure there are great difficulties in extracting its constituents from sea water, and the efficiency of physiological processes is a factor essential to their utilization, but at least there stand materials ready for the mechanism which can employ them.

The predominance of water, no doubt, forces that substance upon living beings as their chief constituent; in view of the fitness of water for the purpose that is in itself a favorable circumstance. Otherwise the organism is left free to choose from all the common elements, and from some of the rare ones, what may be most suitable to its purposes at every