

the scientific worker; that he lives in much greater intimacy with it, and that, above the endless changes and the bewildering detail, he finds it difficult or impossible to rise to a conception of that regularity, uniformity, and continuity which seem to be the first conditions of all human certainty.

It may here be mentioned that in the course of that searching investigation, that scrutiny to which scientific thought has been subjected during the nineteenth century, we have come to see that those three requisites of scientific certainty, those foundations of natural knowledge—regularity, uniformity, and continuity,—may after all be to a large extent fictitious, having their origin not so much in nature itself as in the powers and limitations of the human mind. I have had occasion to point to this in the earlier part of this History, and to point out how the degree of certainty in the various sciences depends almost entirely upon the amount of abstraction to which they have attained, that the closer we approach the single facts, things and phenomena of nature as they present themselves in the actual world itself and not in the artificial world—such as the laboratory, the museum, or the dissecting-room,—the more we come, so to speak, to close quarters with nature itself, the more uncertain and imperfect becomes our knowledge. Such is notably the case with the phenomena of Life, be it in the Individual or in Society.

But there is another equally important feature peculiar to scientific knowledge, which has become more and more prominent during the nineteenth century, and with which the scientific student will always defy