

century, nor can it be stated that uniformity of opinion exists even yet as to the cause of this ignorance. The enormous progress which has been made in our knowledge of the different properties of living things has had an effect on the minds of those searchers to whom we are mostly indebted for it, similar to that produced on a wanderer who ascends an unexplored and distant peak. Ever and anon, after scaling the eminence just before him, he beholds a new and greater one rising into view, which he contemplates with mixed feelings of discouragement and of eager desire for advance. But whereas our wanderer must know that the very greatest height or distance is none the less a measurable and attainable quantity, what hope has the biologist to encourage him on his way? No other—as it appears to some—than the assurance that he is all the time exploring an unknown country, whereas the final achievement is impossible to him through the inaccessibility of the position or the limitation of his own powers. Others, indeed, from time to time have not taken this despondent view, but, elated by the triumphs which every new step has afforded them, have persistently maintained that some day the last step will be taken and the central peak really gained.

4.  
Oscillation  
of biological  
thought.

The history of biological thought, as distinguished from biological knowledge, presents us with the spectacle of a repeated oscillation between these two extreme views: on the one side the continually recurring conviction that the problem of life is insoluble, and, on the other, the assertion that it is soluble, though