character of Darwinian fitness, and at once the whole difficulty was resolved. On all sides instances of environmental fitness were manifest, and casual search brought many other cases to light. The forgotten literature of natural theology is crammed with illustrations, and the recent biological developments of physical chemistry have provided still others. It is, indeed, a very curious episode in the history of thought that these wellknown facts should have been so long forgotten or misconstrued. But, though forgotten, they have, so to speak, lain dormant in the minds of physical scientists, and I have found both chemists and physicists ready to accept them without hesitation. In the following pages an attempt has been made to collect and to interpret such facts, in so far as they arise among the compounds of carbon, hydrogen, and oxygen, especially in the cases of water and carbonic acid. This restriction has been adopted in order to facilitate the logical discussion, and it should be borne in mind that other phenomena, dependent upon the properties of other substances, such as the above-mentioned characteristics of phosphate solutions, belong in the same category.

The argument which has been thus developed is comparatively rigid and closely woven.