

But to continue Haeckel's reasonings : ' There are a great number of things in this world that I cannot fully explain, *therefore* in my wisdom I conclude that there is no God, no evidence of design in the universe, and that any one who fancies there is design, is by that very fact convicted of childish folly, and a love for old wives' fables. It is *my opinion* that long ago certain *brutes* discontinued to make use of certain muscles, *therefore we have lost the power* of moving them ; *therefore* we may conclude that these brutes were our ancestors, *because* they had certain muscles and used them, whereas we have certain muscles but do *not* use them ; *therefore* we have been "*developed*" from these brutes ; *therefore* there is no design ; *therefore* no designer ; *therefore* no God ; *therefore* no truth in many things mankind has hitherto been accustomed to believe.' In this way Haeckel settles the whole matter to his own satisfaction. He fancies that he fairly overwhelms the believers in design when, with a tremendous flourish of trumpets, he tells us that the ' Physiological functions, or vital activities concerned in the evolution of the individual, and of the race, are growth, nutrition, adaptation, reproduction, heredity, division of labour or specialisation, atavism and coalescence.' ' Well,' we may say, ' and what if they are ? ' Science, as represented by this school of philosophy, seems to suppose that she undoubtedly proves the foundationless absurdity of believing in the existence of design, because she shows the probabilities that, on condition that a plant or an animal grows, and is nourished, and is adapted to its sphere in life, and has been reproduced from others like itself, and has many of the qualities of its predecessors, the probability, that, if all this has taken place, it will be the animal it is, and none other. There is nothing very new or profound in all this. The probabilities all go to show that in such and such a case the animal will be just so and so and none other. Big words used in

such a way prove nothing but that even philosophers may sometimes use words without meaning, or at least without seeing that the meaning of those they *do* use can very easily be turned against themselves. For what, it may be asked, are ' Growth ' and ' Nutrition ' and ' Adaptation ' and ' Reproduction ' but names expressive of ' laws ' in accordance with which the designing mind works, just as a watchmaker constructs a watch in accordance with certain ' laws ' of mechanics, or a violin-maker constructs a violin in accordance with certain ' laws ' of sound. The unreasonable or improbability of such a view cannot be shown. If Haeckel objects to the doctrine of design, or ' purposive plan of the universe,' simply because he has never seen such design, he is in the very same dilemma as regards ' growth ' and ' reproduction,' etc. He has never seen ' growth ' nor ' nutrition ' nor ' reproduction.' Neither has he smelled them nor heard them, nor tasted, nor felt them. He has seen indeed that a thing *has grown*, that is to say, he has observed a *change*, which he calls, ' growth,' but ' growth ' itself he has never seen. ' Growth ' is a mere word expressive of a ' law ' or mode of procedure. If he wishes to make any progress beyond the mere observation of the senses, he is as much shut up as the deist is to make inferences of his own, just as, in fact, he does. But with this difference : The deist ' infers ' that the existence of things in nature necessarily involves the pre-existence of some creative mind mighty enough to harbour such conceptions and to carry his designs into execution. This being makes all things according to the counsels of his own will, just as the scientist does *as much as possible* according to the counsels of *his* own will, these counsels presenting to man the appearance of ' laws ' or modes of procedure. The man of science also makes inferences, but ventures no further back than the ' laws,' and these ' laws ' he endows with all sorts of wonderful capacities