is derived from a corresponding piece of some older one, as a lintel was derived from a lintel, a column from a column, a piece of wall from a piece of wall. . . . We appear to be severally built up out of a host of minute particles of whose nature we know nothing, any one of which may be derived from any one progenitor, but which are usually transmitted in aggregates, considerable groups being derived from the same progenitor. It would seem that while the embryo is developing itself, the particles more or less qualified for each new post wait, as it were, in competition to obtain it. Also that the particle that succeeds must owe its success partly to accident of position and partly to being better qualified than any equally well-placed competitor to gain a lodgment. Thus the step-by-step development of the embryo cannot fail to be influenced by an incalculable number of small and mostly unknown circumstances." [1]

Now, wherever we have to do with a very large number of unknown elements which combine to produce a result, we are introduced to those conditions with which the theory of averages and probability deals. The curve of error discovered by Laplace and Gauss to picture the distribution of a large number of observations around the average or mean position, which is taken as the most probable or correct one, comes in as a valuable aid, not in studying the errors of natural growth, but as the graphical illustration of the deviations or variations which cluster around what we call the normal, or with Quetelet the mean, figure. Only the interest is now attached not so much to specifying and defining the

[1] 'Natural Inheritance,' p. 9.