

these generalisations can be tested, elevated to the rank of leading canons of thought and research, and in rare cases to that of the expression of a law of nature. So far, therefore, as the complicated phenomena presented in meteorology, agriculture, and economics are concerned, the suggestions leading to so-called laws have in every case been got elsewhere—from astronomy, chemistry, psychology, history, &c.; and the work of science has subsequently consisted largely in gathering the necessary statistical materials by which to prove, amplify, curtail, or refute them. In many cases it has been found that even elaborate series of observations had not been performed in such a manner¹ as would permit of the necessary inferences being drawn from them. Similarly biologists after Darwin have had to rearrange the collections made by those who came before the epoch marked by that great name.

¹ This refers as much to statistical figures as to the knowledge accumulated in many of the natural sciences. Especially it refers to the statistical material upon which Quetelet based his startling and epoch-making assertions: the earlier critics had, as V. John observes ('Geschichte der Statistik,' p. 364), dealt with the deductions which Quetelet had drawn, without dealing with the empirical material itself. It was therefore of great importance that Prof. Rehnisch of Göttingen for the first time submitted the figures themselves to a searching analysis. He did this in the years 1875-76, in his articles in the 'Zeitschrift für Philosophie und Philosophische Kritik,' through which it became evident that the inferences were, as Lotze had already suggested, to say the least,

premature. "In the memoir 'Sur le Penchant au Crime' (1831), only four years, and in the work 'Sur l'Homme,' only six years 1826-31) of the 'compte général,' furnished the data upon which the astounding regularity with which crime repeats itself was maintained" (V. John, p. 365). Rehnisch adds many other examples of the extreme incompleteness of the records upon which the theory of Quetelet is built up. More recent labours have therefore been to a large extent directed towards gathering more complete statistical data, as well as towards improving the mathematical methods themselves to which not only these but also the population and mortality statistics have been submitted, for the purpose of arriving at average figures.