

of his choice, "Ah, linger still, thou art so fair"; he can fix and keep the star in the focus of his telescope, or protect the delicate fibre and nerve of a decaying organism from succumbing to the rapid disintegration of organic change. The practical man cannot do this; he is always and everywhere met by the crowd of facts, by the relentlessly hurrying stream of events. What he requires is grasp of numbers, leaving to the professional man the knowledge of detail. Thus has arisen the science of large numbers or statistics,¹ and the many methods of which it is possessed. It will form the subject of the present chapter.

5.
The science
of large
numbers.

¹ Gottfried Achenwall (1719-1772) is commonly termed the "father" of statistics. This, however, is hardly correct, either in relation to teaching or to the practical part of the subject, or even so far as the name is concerned. In connection with administration statistics existed in antiquity. They were taught by the celebrated professor, Conring, the elder contemporary and rival of Leibniz, and the name occurs in the 'Microscopium statisticum, quo status imperii Romano-Germanici representatur auct. Heleno Politano' (1672). By Achenwall and his successor, Ludwig August Schlözer (1735-1809), statistics were treated in connection with history. The latter says, "Statistics are history standing still, and history is statistics put in motion." See on this subject, Wegele, 'Geschichte der deutschen Historiographie' (München, 1885), p. 793; also Roscher, 'Geschichte der National-Oekonomik' (ibid., 1874), p. 466. A very valuable and exhaustive account of the etymology and

gradual change of meaning of the words "statist" and statistics will be found in Dr V. John, 'Geschichte der Statistik,' 1. Theil. (Stuttgart, 1884), pp. 3-14. He divides the history of the subject down to Quetelet into that of the "German University Statistics," following in the lines of Conring, Achenwall, and Schlözer, also called the "Göttingen School," and that of statistics as an exact, an enumerative science, which he calls the modern science of statistics. It appears that in English also the two meanings of the word are exemplified in the older use of the term "statist" by Shakespeare ("Hamlet," v. 2.; "Cymbeline," ii. 4.) and Webster, in which sense it meant simply "statesman"; and the modern title 'Statist,' for a statistical and financial periodical. Nor must we forget that England has in her 'Liber judicarius seu censualis Willelmi I., regis Angliæ,' called 'Domesday-book' (1083-86), as David Hume says, "the most valuable piece of antiquity possessed by any nation" ('Hist. of England,' chap. iv.)