

was easy; the invention was the difficulty. The next great name connected with this subject was the astronomer and mathematician Edmund Halley,¹ who had before him, in addition to John Graunt's work, the figures of birth and mortality during the five years 1686 to 1691 collected by Kaspar Neumann for the city of Breslau, capital of the province of Silesia. Tables of mortality, based upon several thousands of life annuities, were prepared in Holland by order of the Grand Pensioner, John de Witt, and used in 1671 as the basis for a loan in the form of annuities.² The growing practice of life insurance, as is well known, attaches a great interest to these tables of mortality, which have been slowly perfected in the course of the last hundred and fifty years; it having been reserved for the labours

¹ For a long time it was not known how Halley came into possession of Kaspar Neumann's mortality-tables; but, in recent times, mainly through examination of the local records of the city of Breslau by Bergius and others, and notably by the aid of S. Grätzer ('Edmund Halley und Kaspar Neumann,' Breslau, 1883), it has become almost certain that Neumann's registers were communicated to the Royal Society by no less a person than Leibniz, who corresponded with Neumann on the one side as well as with the secretaries of the Royal Society on the other. Some of the original documents have been traced in the archives of the Society by Dr Bond and Prof. Burdon Sanderson. It is well known that Leibniz himself attached great importance to accurate statistical knowledge of

all kinds, and considered the collection of such to be one of the main duties of the various academies which he planned or founded.

² "Le grand pensionnaire de Hollande, Jean de Witt, se fondant sur les calculs de probabilités enseignés par Chrétien Huygens, se servit, comme éléments d'observation, des résultats constatés sur quelques milliers de rentiers viagers. Il présenta sa table aux états généraux le 25 avril 1671, pour servir de base à un emprunt fait sous la forme d'annuités viagères. Cette table citée par M. de Baumhauer, se trouve dans les registres des états de Hollande, année 1671" (Block, *loc. cit.*, p. 196). A translation of this document appeared in 'Contributions to the History of Insurance' by F. Hendriks, 'Ass. Mag.,' vol. ii., 1852.