

field is wide, and not limited to one country. Dr Alborn has made a most valuable contribution which, it is hoped, will be followed by others.

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Charles Babbage and the Assurance of Lives. By MARTIN CAMPBELL-KELLY (*IEEE Annals of the History of Computing*, 6, 3, 5–14, 1994)

Martin Campbell-Kelly argues that many of Babbage's contributions to knowledge, including life insurance, can fairly be regarded as of second rank, if not as second rate. Much of Babbage's reputation in the life insurance and actuarial field is said to have derived from his account, related in his autobiography, of the impact of *A Comparative View of the Various Institutions for the Assurance of Lives*, 1826, on the Life Assurance Bank of Gotha. There is no doubt of its influence in this respect.

Babbage was appointed actuary to the Protector Life Assurance Society, a company which advertised its forthcoming operations in the years 1824–26, but did not open to business. It was to have been a substantial operation, with a capital of £3 million and an impressive Board of Directors. Babbage's work for the company, together with a number of reforming ideas of his own, formed the basis for the 1826 book. The 1826 book is an early survey of the life assurance companies, together with critical comment. Its information is not generally available elsewhere, and to that extent it is certainly an important source. Dr Campbell-Kelly relates this well, but does not mention that, in addition, it influenced the formation of at least one Scottish life assurance operation. Nevertheless, much light is shed on the Protector Life Assurance Society and Babbage's life insurance work generally.

Dr Campbell-Kelly has not missed Babbage's empirical formula for the law of mortality:

$$l_x = 6199.8 - 9.29x - 1.5767 \frac{x(x-1)}{2}$$

which was intended to approximate to Richard Price's Swedish mortality table (the only source is a footnote in *J.I.A.* 6, 186). Dr Campbell-Kelly has given a good overview of Babbage's work in the field, and shows how it fits into Babbage's development. He gives a helpful list of references, and has provided a useful source document. Dr Campbell-Kelly is also the principal editor of *The Works of Charles Babbage*, 11 volumes.

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