

- E. ZWINGGI. *Leben und Sterben in mathematischer Darstellung*. A history of the development of the idea of a Law of Mortality.
- K. STAUBER. *Beiträge zur Theorie der Kompakttafel*. These are Life Assurance Mortality Tables expressed in terms of duration only, combining ages in appropriate proportions. After referring to the works of Smolensky and of Del Vecchio the suitability of a table taking account of the original distribution of the sums assured according to age is investigated and it is shown that reserves by the Compact Table are less than the true Select Table reserves when calculated retrospectively. In the example given the deviations are very small but the range of ages is from 25 to 45 only and the group consists of 20-year Endowment Assurances. Though there are arithmetical difficulties to be overcome in practice the underlying ideas are most interesting.
- H. SCHÄRF. *Über eine Anwendung des Zeichenbewahrungssatzes*. A generalization of one of the principles set out by Lidstone in his paper in *J.I.A.* Vol. XXXIX on changes in Pure Premium Policy Values. If the changes in mortality are positive at all ages involved then the new reserves will be greater than the old ones provided that these changes form a constant or diminishing series.

#### NOTES ON THE TRANSACTIONS OF THE FACULTY OF ACTUARIES (VOL. XVII, pp. 106-118 [1942])

THIS part contains an interesting article on 'The Investment Value of a Varying Life Interest', by G. J. Lidstone, a subject which does not appear to have been discussed before. The author points out that a fixed investment, interest income and sum assured with a varying premium, though theoretically simple, is impracticable; he therefore treats the investment as varying, written up or down from year to year, with a varying interest income and sum assured but a fixed annual premium. He shows algebraically and numerically how results may be obtained both for life interests in possession and in reversion. He also discusses the indeterminateness of the problem which, as he points out, is also implicit in a uniform life interest.