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NOTES ON FOREIGN ACTUARIAL JOURNALS

By Sir W. P. ELDERTON, C.B.E., F.I.A., F.F.A., Ph.D. (Oslo), and
C. C. Nicholl, O.B.E., B.A., F.I.A., F.F.A.

SWITZERLAND

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The Presidential Address refers to the revision of premium tariffs asked for by the Government, war compensation, and other matters. A circular in German and French embodying ideas on the essentials of a sound actuarial valuation of a pension fund was distributed among the members and was the subject of a debate: many of these funds are financially unsound and there has been a tendency to ignore actuarial advice.

Ernst Zwinggi. *Untersuchungen über den Einbezug der vorzeitigen Vertragsauflösung in die Berechnung und Darstellung der Tarifprämie der Todes- und Erlebensfallversicherung.* It is admitted that making allowance for withdrawals in calculating life assurance and annuity rates is not at present of practical significance. Analysis by both continuous and periodical methods is followed by numerical examples based on a withdrawal rate of 7·6% in the first year, 3·6% in the second year, and thereafter 1·7% each year. The resulting changes in the tariff are moderate.

J. Meier. *Kombinierte Einzel- und Gruppenrechnung zur Bestimmung des Bilanzdeckungskapitals in der Lebensversicherung.* Describes a method under which various types of life assurance (previously divided into duration groups 0–14, 15–29, 30–44, etc.) may be combined and valued according to the formula:

$$\Delta_t = s_{\overline{t}|}\, P_1 + t P_2,$$

Δ_t being the increase in the policy value in t years after some fixed intermediate duration, while P_1 and P_2 are obtained from simultaneous equations based on selected durations (e.g. 5 and 10). The accumulation is at a high rate of interest; 8% has been chosen in the examples given. The method is of course empirical, but it is claimed that it allows of the quick computation of intermediate reserves with a fair degree of exactitude. Cf. H. J. Tappenden, *J.I.A.* Vol. LXI, p. 63.

M. Müller. *Note sur le produit de plusieurs probabilités d'extinction appliquées à des groupes de valides ou d'invalides.* The formula:

$$l^a_{x+1} = l^a_x\,(1 - i_x - q^a_x + \tfrac{1}{2} i_x q^i_x)$$

assumes that persons becoming disabled do not recover within the year, but here it is assumed that they may do so, become disabled again, and so on, and the mathematical implications are set out.

H. Wyss. *Beobachtungen über die Rentner-Sterblichkeit bei der Schweizerischen Lebensversicherungs- und Rentenanstalt.* The Annuity Tables referred to are based on the experience of 1927–37 and include a margin of from 20 to 30% to allow for future improvements in mortality. A Makeham formula was adopted. Lives (not policies) were the basis, and joint and survivor cases were excluded. The paper concludes with observations on forecast mortality, in which reference is made to the British Annuitants (1900–20) Table.