

The Mortality among Norwegian Assured Lives until 1925.

[Morten Johansens Boktrykkeri, Oslo, 1936, pp. 183+103 (tables).]

This is the official report of the first joint mortality investigation into the mortality of Norwegian lives assured and is written by Mr. Fr. Lange-Nielsen, head of the Statistical Bureau of Norwegian Life Companies (the Norwegian version appeared in 1935). The Statistical Bureau was founded in 1920, and is such a bureau as Orr envisaged in his paper to the Faculty in 1911 when he wrote, "That Bureau would be under the complete control of a Committee appointed by the Faculty and the Institute. . . . At the head of this Bureau I would place as Chief, an Actuary of the best attainment available . . . I would guarantee him a permanent appointment, and give him . . . permanent assistants."

A point of major importance is that "the investigation is founded on the *electric machine handling* of cards." The particular machine used was The Bull machine, which requires a similar type of card to the better known Hollerith and Powers machines. The use of cards enabled various group divisions and special investigations to be made. For example, the experience of male lives assured has been examined in four periods: (i) 1847-1900, (ii) 1900-1910, (iii) 1910-1920, (iv) 1920-1925, with the policy as unit and also with a sum assured of 100 kroner as unit. It is stated that "the plan also has in view a special investigation of the mortality among assured lives whose policies have been reduced through failure to pay the premiums (paid-up or free policies)."

It is not possible to consider in detail the many points of interest which arise. All we can do is to indicate the scope of the work by giving some of the headings—the age at entry and duration; the making out and handling of the card material; the main features of the mortality; graduation; the influence of selection on mortality; causes of death; the mortality of some groups of substandard risks—and recommend all Fellows and Students to study it carefully.

ERRATA.

Mortality of Assured Lives, 1924-29 (Monetary Tables), vol. i., p. 182. For $\cdot 01557$ read $\cdot 01547$ where $P_{\lfloor 33 \rfloor; \lfloor 42 \rfloor}$ with $3\frac{1}{2}\%$ interest is shown.

T.F.A., vol. xv., p. 96 footnote. For p. 497 read p. 478.