

## CORRESPONDENCE

(To the Editors of the Journal of the Institute of Actuaries)

DEAR SIRS,

May I bring to your notice that in addition to the allusions to Staple Inn quoted in the Institute *Year Book* there is also a reference in Anthony Trollope's *Can you Forgive Her?*, which first appeared in monthly parts during 1864 and was published in two volumes in 1864/65.

The following extract is taken from Chapter LXI:

Of Staples' Inn, who knows the purposes or use? Who are its members, and what do they do as such? And Staples' Inn is an inn with pretensions, having a chapel of its own, or, at any rate, a building which, in its external dimensions, is ecclesiastical, having a garden and architectural proportions; and a façade towards Holborn, somewhat dingy, but respectable, with an old gateway, and with a decided character of its own.

It is interesting that both Dickens and Trollope express a query as to the purpose or use of the Hall, and that in the various references the description should vary between Staples' Inn, Staples Inn, and Staple Inn.

Yours faithfully,  
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DEAR SIRS,

It has been brought to my attention by Dr H. L. Seal that the main proposition demonstrated in my recent article *Laws of Mortality which Satisfy a Uniform Seniority Principle* (*J.I.A.* 82, 114) is easily deduced from a theorem proved by Maurice Hochart and published in the *Bulletin Trimestriel de l'Institut des Actuaire Français*, no. 113 (June 1923), p. 72. It will be recalled that I showed that a law of mortality satisfying a uniform seniority principle is characterized by the fact that  $\mu_x$  must be a solution of a second-order differential equation of the form

$$py'' + qy' + ry = s. \quad (1)$$

Hochart considers the problem of determining the laws of mortality which, for all values of  $t$ , satisfy the equation

$$\prod_{i=1}^m {}_t p_{x_i}^{(i)} = G(\lambda, \rho, \dots, \omega, t), \quad (2)$$

where the superscript ( $i$ ) indicates that the  $m$  lives may be subject to different mortality tables, and where  $\lambda, \rho, \dots, \omega$  are  $n$  independent functions of the  $m$  ages  $x_i$ . He finds that the  $m$  expressions for  $\mu_x$  must all be solutions of the same differential equation of order  $n$  with constant coefficients, and with a constant in the right member, as in equation (1).