BOOK REVIEWS

Methods of correlation analysis. By Mordecai Ezekiel. 2d edition. New York, Wiley, 1941. 19+531 pp. $5.00.

The first edition of this well known work appeared in 1930 and had a marked influence upon the users of correlation theory in this country. Before its appearance attention had been centered upon the calculation of correlation coefficients to many decimal places with too much reliance upon probable errors and too much faith in Blakeman's tests. Ezekiel's book emphasized the regression side of correlation with particular stress on nonlinear regression functions. The use of free hand fitting of regression curves in simple and multiple correlation is clearly and quite completely discussed. As a result of the simplicity of explanations and the careful description of calculation procedures, it soon became one of the most important books in the field of correlation.

The difference between the two editions is a survey of the history of the advances in correlation theory during the intervening decade. As stated in the preface of the second edition these major changes have been "first, in the interpretation of the meaning of standard errors and, second in the application of logical limitations to the flexibility of graphic curves. Other significant developments have been in the perfection of new and speedier methods of estimating the reliability of an individual estimate or forecast." Remaining portions of the subject matter are left practically the same.

In general these changes are well made. Treatment of the reliability of an individual forecast is given in Chapter 19. Probability statements arising in the interpretations of standard errors have been correctly made, but the author did not introduce the terminology of "confidence interval" and "fiducial limits." This would be advisable. In discussing logical limitations of graphic curves it is carefully noted that extrapolation is based on these logical considerations rather than the statistical analysis. Samples give most reliable information for the ranges of the variables included in the sample.

Since the general features of the first edition are so well known, it seems most important to mention here some of the detail in the new edition where particular comment is pertinent.

The method of identifying classes by open class limits is superior to the one used. For example (p. 5) change the notation from 22.5–25.4 bushels to 23–25 bushels. The latter form gives the lowest and