BOOK REVIEWS

measure is equal to 0 if and only if the variables are independent and it attains its maximum 1 if and only if the variables are completely dependent. Although the intensity of correlation is never negative and hence cannot distinguish between positive and negative correlation, the author gives a simple independent method of accomplishing this distinction. The intensity of correlation is closely related to two measures given respectively by Pearson and Tschuprow. Jordan also discusses the conventional correlation coefficient, two additional measures due to Pearson, and Pearson's correlation ratios. The intensity of correlation is the only one of these measures which possesses all of the above mentioned desirable properties.

3. Sur la loi de Poisson, la loi de Charlier et les équations linéaires aux différences finies du premier ordre à coefficients constants, by N. Obrechkoff. The first portion of this paper concerns a system of functions consisting of the Poisson function $(a^x/x!)e^{-a}$ and its differences. Any function of the system is the product of the Poisson function with the appropriate Charlier polynomial. The author gives sufficient conditions for the development of a given function in a series formed from this system. The second part of the paper deals with a pair of dependent fortuitous variables such that each has a Poisson distribution when the other is fixed. This condition determines the formulas for the distribution of the two variables and the unrestricted distribution of each of the variables. The last part of the paper concerns a certain type of linear nonhomogeneous difference equation. The author gives a formula for the asymptotic behavior of the solution. A. H. COPELAND

Tafeln und Aufgaben zur harmonischen Analyse und Periodogrammrechnung. By Karl Stumpff. Berlin, Springer, 1939. 172 pp.

This book is a sequel to the author's volume Grundlagen und Methoden der Periodenforschung (Berlin, Springer, 1937). It contains extensive tables for the carrying out of harmonic analysis of empirical curves based upon interpolation by means of trigonometric polynomials of proper degree through equally spaced ordinates. Tables are given for various numbers p of equal divisions. Tables are given for the proper sines and cosines by which to multiply the p ordinates in order to obtain the proper Fourier coefficients. These tables extend as far as p=40. They also include the best laborsaving arrangement for the ordinates. These tables are followed by the first thousand multiples of cosines and sines of various angles which occur for p=8, 12, 16, and 24, as well as the first hundred multiples of the cosines and sines of all angles of integral degrees in the first quadrant. These