

the more important correlations obtained were equal in degree to the highest correlation which has been obtained by Pearson in biological studies, and which is held to show that biology is almost as exact as any branch of physical science. From these determinations Dr. Norton was led to assert that the phenomena of economics lend themselves far more readily to the possibility of prediction than do the phenomena of meteorology. Recently Professor Norton, like his colleagues Professor Fisher and Professor Chittenden of Yale, has become deeply interested in the economic aspect of public health, and his paper read at the last annual meeting of the American Association for the Advancement of Science, which has been reprinted in pamphlet form, is an extremely interesting and significant discussion. It is fair to look for important practical results from these Yale studies in exact economics.

The development of new statistical methods and the increased use of statistics in all branches of psychological investigation render timely and helpful the work of Prof. Edward L. Thorndike, *An Introduction to the Theory of Mental and Social Measurements* (New York, The Science Press, 1904; 210 pp.). The conception of variability, theory of probability, use of frequency curves, the correct use of averages, selection of units *etc.*, are clearly explained and fully illustrated. Dr. Thorndike's warnings against the more frequent misuses of average and other statistical quantities are so pointed and so well set off by their context that no one can make use of the book without learning at least what *not* to do. While the illustrations and examples are drawn in the main from the psychological sphere, enough are taken from social statistics and the applications to the sociologist's use are sufficiently indicated to make the book of practical value to teachers as well as students of social statistics. Like W. H. Allen's recent volume of essays, *Efficient Democracy*, Dr. Thorndike's book is at bottom intended to show that the "theory of mental (and social) measurements is no display of mathematical pedantry or subtle juggling with figures, but on the contrary is simple common sense" (p. 165).

This is not the place to review *The Nutrition of Man*, by Professor Russell H. Chittenden (New York, Frederick A. Stokes Company, 1907; xi, 321 pp.), as a contribution to physiological theory or to hygiene, further than to say that it has been received in scientific circles as a work of first-rate importance. It is, however, interesting also to the economist, because for the first time it bridges in part the gap between human energy and social wealth. We find here detailed tables summarizing the results of a large number of experimental tests, analyses and measurements showing the proteid and energy needs of

the average human being at rest and at work, and the equivalents in terms of various food products and daily rations. These tables indicate clearly that it is quite within the limit of scientific possibility to determine the total energy of a population, per thousand or per million individuals; to determine the economic application of a certain definite and necessary portion of such energy to the work of obtaining suitable food for its own replenishment; to calculate the amount of energy available for other satisfactions beyond the food supply; and to calculate the average waste. That such determinations will be made within no distant time may confidently be predicted; and we shall then have a new basis for economic theory that will undoubtedly make necessary many interesting corrections and expansions of present teachings.

In Boston, in 1895, over 54,000 persons, constituting more than ten per cent of the entire population, lived in boarding and lodging houses; and the number is doubtless now much increased. Dr. A. B. Wolfe's *The Lodging House Problem in Boston* (Boston, Houghton Mifflin and Company, 1906; 192 pp.), is a study of the causes, conditions and needs of this great group. The history of the South End lodging-house district, with which the book mainly deals, shows within a generation an almost complete transformation of a residential into a lodging-house section. Still more significant is the diminishing percentage of boarding-houses and the relatively increasing percentage of houses tenanted by lodgers who enjoy the greater freedom of taking their meals where they please. The correlations of this change with civic and economic development are well brought out. Dr. Wolfe seems to show that the letting of lodgings can, as a rule, be but moderately profitable to the "landladies" and that the struggle for existence among them is a keen one. The fact that real-estate values in the district are declining furnishes one important element of pressure. Another is a form of "fake installment" business, through which, in an apparently large proportion of cases, unscrupulous real-estate dealers swindle landladies. This pressure, as transmitted to lodgers, shows itself in meaner accommodations, especially in the absence of a public parlor wherein tenants may receive callers; and this situation, which exists in a large majority of the houses studied, plays a peculiarly significant part in the serious problem facing young women in the lodging-house. The fact that the lodging-house population is far from reproducing itself by natural growth supplies another leaf to the book of "race suicide." While somewhat academic, Dr. Wolfe's discussion of immediate and ultimate means for the betterment of lodging-house