

parallel with pitch" is nevertheless the elemental foundation upon which our judgments of interval and the logic of music are based. In the report on pitch discrimination at different levels of pitch, we find a curve which indicates that in terms of fractional parts of a tone keenness in the sense of pitch remains approximately constant from 256 d v to 2048 d v. This curve therefore parallels Rich's limens in that a certain fraction of the vibration appears to correlate with a just noticeable difference of "pitch," as does a similar fraction with a just noticeable difference of volume. It would thus appear possible that Seashore's pitch test involves both pitch-height and pitch-interval. Some observers judging pitch-height may discriminate differences of 3 d v and better at the level of 435; while others influenced by the attitude of interval-difference may tend to require differences exceeding the limen of volume, which at this level would be about 9 d v.

How far this neglect of a direct test for the sense of interval may impair the results of Seashore's diagnosis, it is not easy to say. A corrective is of course to be found in several of the accessory tests which measure the sense of interval indirectly, such as those for consonance and those employing the tonoscope, in singing intervals and in voice control; but the emphasis which the author places upon the test of pitch can not seem just to those who define pitch as height, and who must therefore deny that "pitch is to the musician what color is to the artist—his medium of expression."

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R M OGDEN

J. W. BRIDGES *An Outline of Abnormal Psychology* R G Adams & Co., Columbus, Ohio, 1919, p. 127

This book is intended to be useful to "those medical students and students of social service who desire a general survey of this field but who have insufficient time for a regular supervised course or for extensive reading of the very much scattered literature." It is also "to serve as a guide for students of abnormal psychology in the absence of a comprehensive text-book."

The book is found, however, to be more than a mere guidebook. For example, in the second part, on mental diseases, a concise and carefully arranged table of symptoms is given under the discussion of each type of insanity. The name, "An Outline of Abnormal Psychology" may be taken literally: the book is written actually in outline form. The first part deals with abnormal phenomena in general. Under definitions and classification, Wernicke's classification only is given. This, however, is not held to in the author's discussion of the subject, which begins with sensation, goes on through consciousness and attention, memory, association, judgment, orientation feeling and temperament, to instinct and emotion, innate action, and acquired action, much in the manner of the ordinary text-book of normal psychology. The section ends with chapters on intelligence, personality, and sleep, dreams, and hypnosis. Each chapter contains a full list of all possible abnormalities in the different manifestations of mind, together with their technical nomenclature. Under intelligence, the most generally used methods of measuring intelligence are mentioned. The second part is on mental disease. Feeble-mindedness, usually given at least a chapter in a work on abnormal psychology, is not treated here, except as one kind (cretinism) finds a place under thyroigenous psychoses. All the other varying forms, such as mongolianism, and microcephalis which certainly ought to be described in a book on abnormal psychology, (at least if

that term is taken in its broadest sense to mean not-normal psychology) are not even mentioned but are summarily dismissed when the author distinguishes between amentia or feeble-mindedness, and dementia, explaining that "The former is an innate defect, while the latter is the result of a mental deterioration." No general classifications of the psychoses are given, except the author's own, as implied by his chapter headings, which run as follows: Dementia Precox, (Paraphrenia, Paranoia), Manic-Depressive Insanity, Dementia Paralytica, The Alcoholic Psychoses, Morphine, Cocaine, and Other Drugs, The Presenile and Senile Psychoses, and The Symptomatic Psychoses. But in the third part, on Borderline Diseases, Freud's, Sidis's, and Kraepelin's classifications of the neuroses are presented.

Throughout the work impartial consideration is given to many and widely differing theories of the various phases of abnormal psychology. Copious references are to be found after each chapter. One wishes that a comprehensive index might also have been given a place.

This outline will probably be of greater assistance to those already fairly familiar with the subject, but who need help in clarifying and systematizing their knowledge, than to those who, by the reading of this book alone, would gain their whole information. The work is at once too technical and too abbreviated to be very meaningful to the average laymen.

Clark University

MARJORY BATES.

CARTER ALEXANDER. *School Statistics and Publicity* Silver, Burdett & Co., New York, 1919, p. xix+332

This little book is an outgrowth of the author's teaching at the Peabody College for Teachers. It is produced with the avowed aim of aiding active superintendents of schools to adequately place before the public such statistics as show school needs and school achievements. It is also intended for use as a textbook by those who are "engaged in training future superintendents." Its clear, simple style and the abundance of illustrative material make it very serviceable for either purpose, and as a textbook its value is enhanced by the suggestions to instructors and by the exercises which follow each chapter.

The book falls rather readily into three main divisions. The first of these, consisting of the first three chapters is largely introductory in value. The author points out in the first chapter the various types of errors and deficiencies commonly noted when good but unthinking men are tempted to use figures. The second chapter very practically tells how to collect data, and the third is an argument for knowledge of the technique of statistics on the part of school administrators.

There can be no doubt in the mind of the reader after reading these three chapters that the author thoroughly believes in statistical, or at least graphic presentation of school facts to the public. At the same time he takes a very moderate stand on the question of the amount of statistical knowledge that is practically necessary.

The second division, consisting of chapters four to eight inclusive, affords a very clear elementary presentation of statistical method. The fifth, sixth and seventh chapters are the most difficult in the book and the author admits that they will require little more careful study than the others, but despite this admission it would be hard to find a clearer or simpler exposition of the matters treated. Chapters six and seven, treating of measures of deviation and of relationship, are the most technical, and it is possible that in a majority of cases the busy