

in tastes and plans." From this comes a frequent tendency to suicide. Finally, as a result of this incoherence, the adolescent is especially prone to excess, and M. Mendousse rightly emphasizes the important role which physical fatigue plays in his education. The conclusion follows that the adolescent is neither a big child nor a young man, and that, therefore, he should have an education specially adapted to his needs. The author enumerates the important points of this special pedagogic method, and thinks that they can all be summed up in the following: "Cherish by every possible means and in every branch of his activity the spontaneity of the adolescent. Use constraint only in case he would not, of himself, rise to that minimum of effort, knowledge and morality without which the adult would fall below his manly estate and his social function." In closing, he emphasizes the utility of education and the value of a well-grounded pedagogy in the hands of enlightened educators, showing that "the worth of a people varies in proportion to the sum total of devotion which it expends on its young."

The book is the fruit of much painstaking toil and careful reflection and shows a commendable familiarity with the literature of the subject, especially that derived from American sources. The author discloses great keenness of observation and analysis, and clothes his thought with a lively and interesting style. We hope he will be encouraged to persevere in the investigations on which he has made such a promising start.

G. VATTIER.

University of Caen, France.

ALFRED BINET. *Les idées modernes sur les enfants*. Paris: Flammarion, 1909. Pp. 344. Fr. 3.50.

"This book is a balance sheet," are M. Binet's first words. In it he has sought to bring together the lessons which thirty years of experimental research, carried on chiefly in America and Germany, but to some extent in France, have taught us concerning education. Naturally, owing to the restricted scope of the book, he was obliged to confine himself to those topics which seemed to him most interesting and most vital. He has especially endeavored to show that there is no such thing as "the typical child," but that, on the contrary we are confronted by a multitude of individual differences which, in the past, have been altogether too much ignored. The same instruction is not suitable for

all children; rather each child should be treated in a different fashion according to his nature, not only for his own welfare but also in the interest of society. It would be very desirable, according to M. Binet, to introduce into pedagogy the methods of measuring the learning process that have been perfected in the laboratories, for such measurement "would show us the real progress of each pupil, would enable us to estimate the professional worth of teachers and would furnish us with a means of determining the value of pedagogic methods."

The author has no difficulty in demonstrating the importance for education of a careful study of child physiology. Is not the failure of pupils frequently the outcome of a physical incapacity for work? Do not intelligence and bodily development always go hand in hand? Is not mental ability reduced by the lowering of the physical level? We should, therefore, have careful measurements made in this field, too. It is not merely a matter of pedagogical interest; it is a social question; for the future of our race, the organization of our society is at stake. The sense organs should be carefully tested, for M. Binet shows clearly the role which normal organs of vision and hearing play in a child's life. All progress depends on them. They should be examined by both physician and teacher.

In the following chapter the author develops at length the method to be pursued in measuring intelligence—a method which promises valuable results, provided it is employed by competent persons. He vigorously attacks the prejudice that intelligence is not educable and presents in support of his contentions some strikingly interesting facts drawn from abnormal classes. M. Binet lays particular stress upon memory and shows how it can be measured and developed by methodical and graded exercises. The chapter on the aptitudes of children is, as he says, "only a rough sketch," yet it contains a mass of exact and carefully analyzed data, notably in regard to certain types of intelligence, such as the reflective and the intuitive, the objective and the subjective, the practical and the literary. Along with intellectual work M. Binet insists that manual training should receive consideration, for those pupils who are inapt at the first often make a striking success at the second.

A final chapter is devoted to laziness and to moral education. We can distinguish two types of laziness, the one inherited, the other acquired; the latter can be overcome if properly treated, and even the

former is not altogether incurable. The whole subject of moral education is admirably handled and makes exceedingly interesting reading. The ideal of moral education, according to the author, is "the betterment of the individual, shaping his conduct to social ends, and enabling him to adapt himself the more perfectly to his environment," and the means at the disposal of the educator for the attainment of this end are rapidly passed in review.

Does M. Binet, who is so ardent a partisan of the new pedagogy, completely reject the old? On the contrary, he exerts himself to conciliate its adherents. "The old pedagogy should furnish us with the problems to study, the new pedagogy, the methods of procedure for that study." But he does not leave us great confidence in present-day tendencies, and his conclusion in this connection is worth quoting in full: "Thanks to all these efforts we are beginning to render our knowledge of children more precise, more practical, more useful. Those who familiarize themselves with these methods of study reap the advantage of avoiding mistakes, of correcting prejudices, of fixing their attention on decisive points, and of knowing precisely what must be done in order to arrive at sound conclusions. Considered from this point of view, pedagogy ceases to be a dull, superannuated rule of thumb; it enables us to attain a better understanding of our children's minds, and is already beginning to teach us how to go about the education of their memory, their judgment and their will. It is of service not only to the children but also to ourselves, for, reacting upon our own lives, upon our weaknesses and infirmities, it makes us realize how much we could gain by applying these methods to our own progress. This should be the endeavor of all those who seek to regulate their lives with some intelligence and foresight. It should be the special endeavor of those who occupy positions of authority, and these would do well to remember that, instead of being so preoccupied with material science, with material prosperity, with material industry, it is just as important, perhaps more important, to devote their attention to the proper direction and organization of moral energy; for it is moral energy that rules the world."

The book is full of original ideas, and it will be certain to have great pedagogic influence, for it is indispensable to those who are engaged in educational work. Numerous anecdotes, accurate and detailed accounts of investigations, and the evidence at every point of profound learning

coupled with long experience, make the volume delightfully interesting reading, and render it the best work on pedagogy that has appeared in France for many years.

G. VATTIER.

University of Caen, France.

FELIX ARNOLD. *Attention and Interest*. New York: The Macmillan Company, 1910. Pp. viii, 272. \$1.

This book, or "essay," the author tells us in the preface, "is an attempt to clarify and arrange the many facts that have been brought to light by numerous experiments in psychological laboratories on the psychology of attention and interest." There are in all ten chapters and the material of each is presented under the categories of "description," "illustration," "development," "explanation" and "definition." When skillfully handled, this scheme no doubt possesses much merit, but in the hands of our author it involves a vast amount of repetition, and as each category is broken up into a large number of sub-topics that are all duly numbered and labeled, first in capitals and then in italics, and then frequently sub-numbered, but little coherence and progression are left in the treatment. The illustrations and experiments cited are good, if not too plentiful, but no attempt seems to have been made to bind the subject into a unity on the basis of fundamental principles.

Almost every fact and principle in general, experimental, genetic, and physiological psychology seem to be touched upon, but their relation to attention and interest is often remote. In fact, "attention" appears to be used as practically synonymous with "consciousness," and the book should, perhaps, be regarded as a treatment of the functional psychology rather than of attention and interest in the restricted sense.

The last two chapters bear the general title of "Education" and one would naturally expect to find in them a psychological analysis of attention and interest in their educational bearings, but this is not the case. Only one short section (pages 254-257) may be said to touch upon this topic, while the rest of the space is devoted to a detailed, often trivial, treatment of class-management, with an occasional digression into method.

But in spite of these defects and limitations, the book may prove to be of considerable value as a reference book for the educational psychologist.

W. C. RUEDIGER.

The George Washington University.