the psychological processes involved in the learning of history the place of association, the amount of repetition necessary to fix connections and the use of imagination and judgment are important questions of educational method with which any history teacher should be familiar. Such mooted questions as the proper treatment of important institutions, description of the life of the times and the relating of history to important contemporary activities and problems should also be treated in some detail in a book on the teaching of history.

The reviewer agrees with the statement in the preface that while there are many ways of teaching history it is fundamental to educational method that the teacher know that there are a number of ways of doing the multitude of things connected with everyday procedure in that subject. This book tells the teacher of history about many of these ways and points out the procedure in managing them.

EARLE RUGG.

The Army Mental Tests.—Much has already been written of the work of psychologists in the United States army during the recent war. Their services were manifold and psychologists were utilized in many different branches of the army. The present volume¹ deals with the work of the group of psychologists who were engaged in giving mental tests. This was done under the direction of the Surgeon General's Office. The work started shortly after the United States declared war and continued long after the armistice. Hundreds of psychologists were engaged in the service and nearly two million men were examined. The reader will, therefore, readily appreciate the difficulty of telling the story of this vast undertaking and of presenting the results of such a large accumulation of tests. The volume is under the general editorship of Yerkes. It is divided into three parts, each under a separate editor, namely Yerkes, Terman and Boring respectively, and each one of these expresses obligations to many helpers.

Part I deals with the history and organization of the service from the first unofficial tests tried out under the auspices of the American Psychological Association, through the official trial of the plan, the organization of the service as a part of the military establishment, down to the abandonment of the work in 1919. The report brings

¹ Psychological Examining in the United States Army. Edited by R. M. Yerkes. Memoirs of the National Academy of Sciences. Vol. XV, 1921. Pp. 890.

out well the various difficulties that the psychologists had to meet and it makes a very instructive, although at times, depressing picture. What seems to have retarded and hampered the work more than anything else was the continual confusion of psychological examining with psychiatric work. It emphasizes again, what was apparent at the time, that the psychological service was misplaced as a part of the medical branch of the army, that it should have been an integral part of personnel work, and not under the control of the Surgeon General's Office. In spite of these and many other handicaps, it is gratifying to know how much was accomplished and how favorably in general the work was received. The whole report shows clearly the perseverance and doggedness on the part of the Chief of the Division of Psychology in the face of much prejudice and ignorance. He and his co-workers are to be congratulated upon what they accomplished.

In Parts II and III we are given a description of the development of the tests employed and some of the more important results. Part II is in the main historical and deals largely with examination *a*, from which *alpha* was developed. It also explains how the need for a test of illiterates and foreigners arose and how in response to this *beta* and the performance scale were constructed. Part III presents distributions of scores for a fair sampling of the two million men tested. There was neither time nor opportunity to tabulate the complete data, nor is it likely that much additional information would have been obtained by so doing. There is in this part of the book a great number of distribution tables and it will prove a perfect mine for the statistician who may desire to work up other aspects of the data. The conclusions drawn are extremely conservative and they do not go beyond the data at hand. They arouse in the mind of the reader many interesting conjectures, and these results should prove a stimulus for further research in many directions.

Because of the very nature of a large work such as the one before us, it is inevitable that there should be a certain amount of repetition and overlapping, and this is the case particularly with reference to Parts I and II. There are several lines of investigation that one would have liked to see undertaken or discussed more thoroughly, but it would be absurd on the part of a reviewer to point out omissions, because the editors are keenly conscious of such themselves and could unquestionably tell of more things that might have been done than any reviewer could. Considering the time and assistance available, they have certainly made the most of their opportunities.

The reader of this volume is impressed with the amount of work accomplished in so short a time. It is a splendid example of what cooperative research can do with the right motive or stimulus. The army testing established the validity of the group test method in the space of a few months and silenced the doubts and misbelief that were current before that time. It furthermore has given us the best estimate of the average mental ability of the population at large and has shown us how much we had overestimated this in the past. And, lastly, it brought the use of mental tests very much to the front and demonstrated their value to the world at large. It is very valuable to have a complete record of the work. This volume will remain a worthy monument, better than one in stone or brass, recounting the patriotism of American psychologists and their desire to serve their country in times of great need.

R. PINTNER.

Adolescence.—Ever since Stanley Hall wrote his monumental work on adolescence, this period of life has attracted many writers. The present book¹ is by the author of the well-known "Psychology of Childhood," which was published in 1893 and which formed an important contribution at that time to the child-study movement. In the same way the author has now given us the benefit of his observations and thoughts on adolescence. In a pleasant, readable style he discusses instinct, emotion, intellect, will and so forth with reference to the adolescent, and with reference to the difference between the adolescent and the child. Considerable attention is paid to the aesthetic, moral, and religious aspects of the adolescent life. The book abounds in broad generalizations and one could wish for more specific information in their support. In many places one feels the lack of actual data. For example, when the author tells us with reference to the sense of smell in the adolescent that "the threshold is lowered, and the just observable difference in odors is very small," one feels the need of experimental evidence in confirmation of such a statement, and the same is true of many other similar statements found in the book.

R. PINTNER.

¹ Tracy, F.: *The Psychology of Adolescence*. Macmillan, 1921. Pp. 246.