

application of the more precise methods of research have added greatly to our knowledge of fish life. Much of this information is buried in scientific publications not available to the layman, and often couched in technical language that he would not understand anyway. In "The Life Story of the Fish", first published ten years ago, its author endeavoured to provide a readable digest of all available information about fish, both scientific and otherwise, and in his own words, "to set forth all that was known about fish that might be of interest to the angler, the aquarist and to the normal human being of enquiring mind". The present edition has been revised and largely rewritten in order to bring it up to date. It is a veritable mine of useful information about the structure, habits and life-histories of fishes, including salmon, trout and other game fish, and should prove of interest and value to a large public. It is a pity that here and there the popularization is overdone by the inclusion of such statements as "the striped bass is only half an inch long when he succumbs to modesty"—that is, when scales first begin to develop. But the title of the book will warn the reader to expect such lapses, for it is hard to understand what possible meaning can be attached to "morals and manners" as applied to fishes.

"The Ways of Fishes" is also a popular book covering very much the same general ground as the above, but rather less successfully. For many amateurs perhaps the most interesting chapters are those dealing with aquaria and aquarium keeping.

The third book, "Sport Fishing in Canada", is intended to serve as a "Compleat Angler" for northern North America from Newfoundland to the Yukon; and since the Canadian game fishes are mainly the same as those of the northern United States, it applies also to fishing south of the border. All the important fishes are included—their distribution, fishing methods and fighting qualities being discussed at length. There are seventy illustrations, a number of which are of poor quality and fail to do justice to the book.

G. A. STEVEN

131

PSYCHOLOGY IN THE SERVICES

Personnel Selection in the British Forces

By Dr. P. E. Vernon and Dr. J. B. Parry. Pp. 324. (London: University of London Press, Ltd., 1949.) 20s. net.

DURING the Second World War psychological methods of personnel selection were developed in all three Fighting Services in Great Britain on an unprecedented scale. In the course of the first year, a few tentative investigations into the possibility of classifying recruits by means of tests and similar devices were carried out by psychologists, usually on their own initiative; but these experiments were not very extensive and often not very welcome. Shortly after the Dunkirk evacuation, however, a Psychological Advisory Committee, consisting of Sir Cyril Burt, Prof. J. Drever and Dr. C. S. Myers, was appointed by the new Adjutant-General, Sir Ronald Adam; and on their recommendation, a Directorate for Selection of Personnel was established. A scheme of testing and allocation was worked out, first for new recruits and afterwards for officers. Similar arrangements were introduced in the Navy and in the Air Force. Dr. P. E. Vernon, almost from the

very start, was officially connected with the researches set on foot both at the Admiralty and at the War Office; and at a later stage Dr. J. B. Parry succeeded Prof. E. A. Bott as head of Training Research (as it was called) at the Air Ministry.

The book which they have now jointly written gives a brief history of the way in which the administrative procedures were developed in each of the three Services, describes in detail the tests and other methods that were eventually adopted, and summarizes the more important results. Their aim is not so much to explain how military efficiency may be improved by the use of psychological devices, or to discuss their researches from a technical point of view; they have addressed themselves rather to the industrialist and the educationist, and their object is chiefly to show how the methods employed with such success during the War may now be applied with equal benefit to the problems of peace.

They begin with an instructive chapter on the rise of vocational psychology in Great Britain. As they point out, the scientific foundation was laid by Galton's work on individual differences and the ingenious experimental and statistical procedures that he elaborated. The application of such methods to practical problems began with the appointment of a psychologist to the London County Council in 1913. Later it was found convenient to extend the psychologist's work to cover the supervision of the new Department of Vocational Guidance in the National Institute of Industrial Psychology. Vocational guidance was thus treated as a continuation of educational guidance; and the principles, the methods, and even the terminology gradually evolved for the testing and classification of children at school have thus been largely taken over for the work of personnel selection among adults. In the Forces the psychological investigation arising out of war-time requirements was, especially in its early stages, largely planned and carried out by psychologists who had been trained at the Institute or by teachers who had had some psychological instruction in their college courses or had gained experience of psychological methods in schools or elsewhere.

As the writers point out, these early educational influences should make it both easy and appropriate for the knowledge gained from the work in the Forces to be re-applied to current educational problems. The application of such methods to industry is bound to be slower, more tentative, and far less systematic. What is possible in the school or in the fighting Services under war-time conditions is scarcely feasible in the factory or the office. Nevertheless, the results which the writers report in their own particular spheres demonstrate beyond all question that, provided the limitations of the methods are realized and the actual work is supervised by trained psychologists and not by amateurs, then a vast improvement in general efficiency can be secured by a scientific scheme of personnel selection.

Perhaps the most valuable part of the book is the chapter of conclusions. In the form of forty concise generalizations, the authors have brought together the main theoretical and practical inferences which they believe can be deduced from their data and their general experience. Their survey should be of the highest value, not only to those who are continuing the work in the Services, but also still more to those who are concerned with building up similar schemes in education, industry or government departments.