on p. 306, that indirect association of ideas is "easily demonstrated," when several investigators, one recently in Prof. Wundt's own laboratory, have failed to find any evidence of such a mode of association.

The translation has been very well done, and especial care has evidently been devoted to the rendering of the German psychological terms. The translators have very freely used the term "to sense" as a verb corresponding to sensation, and as the equivalent of "empfinden." This American innovation, which has already been advocated by Dr. Titchener, is also used by Prof. Lloyd Morgan in his two books, and it must be acknowledged that there is decided need of some such term.

Dr. Külpe is chief assistant to Prof. Wundt at the Leipzig Institute, and his experience in teaching and in directing investigation must have contributed largely to make his book what it is—one of the best existing expositions of experimental psychology. The general teaching follows that of Wundt, but there is much that is novel in matter and arrangement. Physiological details and the technique of experimental methods are omitted or treated very briefly, but the principles of the methods are fully discussed. Dr. Külpe's book will probably be largely used as a text-book for advanced students.

Prof. Lloyd Morgan's two books, to a certain extent, cover the same ground. Each is an exposition of general psychological principles to serve as guides, in the one case, to the scientific study of the animal mind; in the other, to the practical study of the child's mind. Both books are characterised by the sound common sense with which the author treats his problems.

The views held on the nature of the animal mind are very similar to those of Wundt. Both agree that in studying animal psychology the scientific method is to explain actions by the simplest possible mental processes, and this method has led both to similar conclusions, although expressed in somewhat different language. Wundt refers all intelligent acts of animals to simple associations, to the exclusion of any higher apperceptive process; while Prof. Morgan explains such acts by simple sense experience, and doubts, though he does not deny, the existence of any true reasoning or reflective process. A point justly insisted on by Prof. Morgan is that observation of an apparently rational action in an animal is of little value without knowledge of the process by which the action has been developed; "in zoological psychology we have got beyond the anecdotal stage; we have reached the stage of experimental investigation."

The book for teachers is very interesting, and contains much that should be of practical value. It is noteworthy that the appreciative preface, with its ample recognition of the part that a knowledge of psychology should take in the equipment of the teacher, is written by Dr. Fitch, late one of H.M. Chief Inspectors of Training Colleges.

Prof. Ladd has attempted a very difficult task in writing a primer of psychology suited for the young. His book is often simple and clear; it is to be feared, however, that youthful readers will find much of it beyond their capacity. The author has, at any rate, avoided the fault of being too dogmatic.

OUR BOOK SHELF.

Radiant Suns. By Agnes Giberne. (London: Seeley and Co., 1895.)

IN this sequel to a former work, the reader is taken by easy stages into the domain of spectroscopic astronomy and the evolution of worlds. Though following some astronomers who ought to know better, the authoress takes the unphilosophical view that the whole process of stellar evolution is one of cooling; and this is the more difficult to understand, as she is evidently not unfamiliar with the fact that a condensing body may actually be getting hotter (p. 307). While strongly advocating the value of hypotheses as aids to investigation, she is inconsistent enough to make contemptuous reference to the "half-fledged" theories of "scientists of a lower order" (p. 240); her qualifications for making such distinctions are not very clear to us, but her opinions seem to depend to some extent on personal bias, since special prominence is given to the views and work of one observer.

A preface is contributed by Mrs. Huggins, who is careful to disclaim responsibility in matters of opinion, and laments that the masses of men overlook the fact that "the investigator, absorbed in pursuits far removed from those of ordinary life, is also a toiling worker, and a worker of the highest order."

The illustrations are admirable and quite up to date. It would be worth while, however, to revise the coloured plate of stellar spectra, so that the spectrum of Vega would not be robbed of its strongest characteristic—the lines of hydrogen.

We believe that the book will succeed in awakening a desire for further knowledge in the minds of thoughtful readers; and if so, it will serve a useful purpose.

Album von Papúa-Typen. Von A. B. Meyer and R. Parkinson. (Dresden: Stengel und Markert, 1894.)

TO ethnologists, the Papuan race is one of the most interesting in the world. Whether the Papuan represents a distinct type of mankind or not is doubted by some observers, though the balance of evidence is in favour of that conclusion. This splendid collection of fifty-four plates reproduced from photographs, and representing about six hundred portraits of individuals, should be of great assistance in studying the similarities and differences between the typical Papuan, and the natives of southern and eastern New Guinea. The photographs illustrate the natives of New Britain, the Duke of York Islands, New Ireland, Admiralty Islands, Solomon Islands, German New Guinea, and Dutch New Guinea. They represent the people as they are ordinarily seen, and also decorated with the strange costumes assumed at feasts. Particularly striking are the pictures of natives of New Britain adorned for one of their Dukduk dances, and of the ingenious basket-work traps used by the fishermen. Ethnology will benefit by the publication of this collection of really excellent pictures.

Farm Vermin, Helpful and Harmful. By various Writers. Edited by John Watson, F.L.S. Pp. 85. (London: William Rider and Son, Limited, 1894.)

COMPOSITE books are almost always unsatisfactory, the chapters by the various contributors being necessarily unequal in quality and length. We really cannot understand why this little book of eighty pages should not have been written by a single zoologist, instead of the eight who have helped to construct it. The only justification for the patch-work is that each of the writers is more or less an authority upon the subject he describes; but the book is of such an elementary