

Lectures on the Elementary Psychology of Feeling and Attention. By EDWARD BRADFORD TITCHENER. Pp. x + 404. New York, The Macmillan Co. 1908.

This volume contains eight lectures given while the author was non-resident lecturer in psychology at Columbia University in 1908. As the title implies, they give a résumé and critical discussion of the recent work and current theories of psychology on the two topics mentioned.

The first chapter contains a discussion of sensation and its attributes. The attributes are broadened beyond current usage to seven. They are divided into two groups. The intensive, in which are grouped the familiar intensity, duration and extent together with clearness; the qualitative attributes, that for sight would include hue, tint and chroma. Differences in kind of sensation depend upon distinguishable differences in the qualitative attributes; differences in degree upon differences in the quantitative attributes.

Chapter II. is devoted to a consideration of the criteria that distinguish affection from sensation. It is often asserted that feelings and sensations are different in that we become habituated to feelings not to sensations, that feelings are centrally relatively more intense, that feelings are subjective, sensations objective; the one is non-localizable, the other localizable; that feelings exhibit antagonism in quality and are unclear, while sensation qualities are not necessarily opposed and are or may be clear. The first two of these criteria are rejected absolutely, the next two are held to be doubtful, while the last two alone are retained.

Chapter III. discusses Stumpf's doctrine of feeling as a special kind of sensation, sense feeling. The doctrine is rejected as out of harmony with introspective results and supported by rather uncertain psycho-physical evidence. The fourth chapter is devoted to Wundt's tridimensional classification of the feelings with the same negative result.

The fifth chapter begins the discussion of attention with a discussion of the nature and

conditions of clearness. Clearness and attention are identified. The conditions of clearness are found ultimately in the nervous disposition, the predisposition of the central nervous system and sense organs. The sixth and seventh lectures are devoted to the laws of attention. The first asserts that clearness is an independent attribute of sensation; the second that there are always two levels of clearness to be distinguished, although the rigidity of the distinction is softened by the statement that there are minor differences of clearness within each level. The third law is that the peripheral and central adaptation requires time and that as a result (4) there are temporal displacements since these accommodations bring earliest to consciousness the stimulus to which the organism is adapted. The object of attention is always a unitary field within which several part contents may be distinguished. The fluctuations of attention are referred to the periphery. There is finally the hope expressed that it may be possible some day to determine the law of the degree of clearness, but the most that can be done at present is to discuss the various methods that have been suggested for the measurement of attention.

In the final chapter affections would be identified with the unclear elements of consciousness; their sense organs have not yet become fully differentiated. Attention and feeling are positively related. We can attend without feeling, but can not feel without attending. Attention increases the effectiveness of feelings as it does of sensations. Attention is characterized in addition to clearness by its relation to will in the Wundtian sense. Passive and active and secondary passive are retained as real distinctions and supported on genetic grounds. The final theory of attention is in close agreement with Wundt.

These are the outlines of the book, but a summary can give no idea of the painstaking care with which the sources have been gone through, nor of the scrupulous endeavor to give every man and every theory its due. There is a refreshing absence of anything that even approaches dogma, and the greatest

possible readiness to leave a problem open rather than to venture a solution that shall be at all one-sided. In fact, if there is any criticism to be passed it is that anxiety to be absolutely fair to the views of others sometimes prevents the author from stating his own with the positiveness that makes for definiteness. If one wants a statement of recent theories and the established facts in feeling or attention the volume is to be recommended as the best available. It gives not merely a clear, full and sympathetic statement of the theories themselves, but a measured and undogmatic criticism, and the resulting theory of the author.

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Camps and Cruises of an Ornithologist. By FRANK M. CHAPMAN. With 250 photographs from nature by the author. Pp. xvi + 432. New York, D. Appleton & Co. \$3.00.

As its title indicates, this book is a series of narratives. But, though popular in style, it is not lacking in seriousness, for it contains many fresh or new observations on the habits of birds which will be of permanent value to ornithologists. It is based largely on the author's field work in gathering material for the now rather well-known "habitat groups" of birds exhibited by the American Museum of Natural History. Therefore, it may appropriately be called a by-product of museum work, and, as such, though published privately, it admirably illustrates the way in which a modern natural history museum may carry its broadening influence beyond its exhibition halls.

The eight sections into which the book is divided contain related chapters, each devoted to a certain species or a single expedition. Some of these have been published previously in periodicals and others will be recognized in certain quarters as having been the subjects of public lectures, but some are entirely new and all are pleasing in style and either replete with real information or most suggestive of possibilities in specialized bird study.

Travels about Home, the first section, includes a few little intimacies with blue jays,

meadowlarks and nighthawks and indicates the opportunities for bird study that lie close at hand, even to the busy New Yorker. The next, *Bird Life of Two Atlantic Coast Islands* (Cobb's Island and Gardiner's Island), deals with some interesting species of water birds likewise found at home but a short distance from our largest cities. *Florida Bird Life*, following, is notable for its almost exhaustive study of the brown pelican and its revelations of the secrets of the great rookeries of herons and egrets, including the now rare experience of meeting the roseate spoon-bill in the breeding season. *Bahama Bird Life* includes observations on terns, boobies and man o'war birds, but easily takes first rank for its superbly illustrated and fascinating story of experiences in the wonderland of flamingoes. *The Story of Three Western Bird Groups* briefly relates incidents of visits with the prairie chicken in Nebraska, the golden eagle in Wyoming and various small desert birds in Arizona. This is followed by *Bird Studies in California*, which is introduced somewhat modestly, perhaps in deference to the splendid work being done by Pacific coast ornithologists; but, in view of the limited time spent in the field, most creditable results are shown, especially in the chapters on the water birds of the San Joaquin Valley and of Lower Klamath Lake. *Bird Life in Western Canada*, like most of the book, is devoted to water birds, with the exception of a chapter on the white-tailed ptarmigan and other birds of the higher parts of the Selkirk Mountains. The concluding section consists of the single chapter, *Impressions of English Bird Life*.

The half-tone illustrations, 250 in number, are mostly of that excellent character regularly attained by our best bird photographers. The few that are not technical gems of photographic skill are quite justified by their ornithological interest, while some certainly deserve rank among the most interesting and successful bird photographs ever taken. Typographical errors and a few other slight evidences of haste while the book was in press are rather too frequent to be over-