

his first experiences of sport were obtained in the fever-stricken Sandarbans of Lower Bengal. Proceeding northwards, he had the good fortune to be entertained by the Maharaja of Kuch-Bihar, whose territories are now the finest sporting-grounds in India; and here he obtained, in addition to tiger, the large Indian rhinoceros, the gaur, and the wild buffalo. After a short sojourn in Gya and Ceylon, the party then crossed to Somaliland, which was at that time in its prime as a sporting country. From the Italian province of Erithræa the Count proceeded by sea to Zanzibar, whence he made a journey of considerable length into the interior of Equatorial Africa, obtaining specimens of Coke's hartebeest (*Bubalis cokeri*), and the fringe-eared beisa (*Oryx callotis*). The final stage of the tour was Russia, where elk was added to the list of large game.

Although, as the author himself states, the work lays no claim to having advanced either zoological or geographical science, yet it may be commended as a very interesting account of types of animal life which are only too rapidly disappearing from the face of the earth. In fact, it is so interesting that there would seem a considerable probability that an English translation would be well received.

R. L.

#### OUR BOOK SHELF.

*Die Moderne Physiologische Psychologie in Deutschland.* By W. Heinrich. Pp. iv + 249. (Zürich: Speidel, 1899.)

*Zur Prinzipienfragen der Psychologie.* By W. Heinrich. Pp. iv + 74. (Zürich: Speidel, 1899.)

*An Outline Sketch, Psychology for Beginners.* By Hiram M. Stanley. Pp. 44. (Chicago: The Open Court Publishing Company, 1899. London: Kegan Paul and Co., Ltd., 1899.)

MR. HEINRICH'S two little works demand careful study as well thought-out and consistent expositions of a psychological attitude which is in many ways attractive. The author, who may be described as a disciple of Avenarius minus his master's metaphysics, holds strongly the necessity of making the principle of psychophysical parallelism, understood in the most rigid sense, the basis of all psychological inquiry, and would consequently recognise no causes or causal laws other than those of the physical and physiological series. He has little difficulty in showing that Wundt and other contemporary writers, who, while professing the doctrine of parallelism, believe in causal sequences between psychical states as such, are inconsistent with their own professions. That the inconsistency can be avoided, or that an intelligible account of human life can be given in terms of purely physiological sequences, is scarcely so clear. As the author himself admits, it is a necessary consequence of his theory that the only difference between rational and purely reflex reaction on stimulus is one of comparative complexity. Whether an account of human life which reduces all activity to the purely reflex type is not like the play of *Hamlet* with the part of *Hamlet* left out, he does not discuss. The question is, however, directly suggested by his contention that, in treating of the behaviour of our fellow-men, we have no right to introduce the notion of consciousness, but should confine ourselves to establishing physical relations between changes in their environment and their corresponding outward reactions. He seems to forget that language, for instance, loses half its significance if you neglect to observe that it not merely can be understood by a listener, but is meant by the

speaker to be understood. And even if we could agree to take no notice of consciousness in our fellows, it still remains, as the author admits, to examine the relation between the environment, which on his theory all science describes, and ourselves the describers. Thus all the problems about the relation between consciousness and its objects which Mr. Heinrich banishes from our psychological study of our fellows return upon us as soon as we attempt to understand our own relation to our environment. Perhaps the chief value of the author's discussions is that by his insistence on the too often disregarded consequences of the doctrine of parallelism, he compels his readers to ask themselves whether the old belief in the interaction of mind and body is not, with all its difficulties, more satisfactory than the fashionable substitute for it.

It is painful to turn from Mr. Heinrich's able and thoughtful work to such a piece of loose and unsatisfactory popular psychology as Mr. Stanley's essay. If psychology is to be taught in schools at all—in itself a debatable question—it ought, at least, to be taught in a precise and definite form. These scraps of inaccurate chatter are of no more value in psychology than they would be in elementary physics or in any other science. Read, for instance, the light and airy sentences (pp. 8-9) in which Mr. Stanley disposes of the difficult problem of space-perception. What would be thought of a writer on heat or chemistry who should evade all the puzzles of his subject by such loose and flimsy generalisation? In truth, the only way to treat work of this kind with kindness is to say nothing at all about it. The only words one can find in which to characterise it are that, like a good deal of popular writing on psychological topics, it is quite worthless, because the writer has set no serious standard of scientific accuracy before him.

*Rural Wealth and Welfare: Economic Principles illustrated and applied in Farm Life.* By Geo. T. Fairchild, LL.D. (New York: The Macmillan Company, 1900; London: Macmillan and Co., Ltd.)

THE scope of this treatise is perhaps more accurately indicated by its alternative title: it is primarily a textbook of economics, the concrete illustrations being taken preferably from objects and practices familiar to agriculturists. The book is accordingly addressed to this class of the community, though it may be doubted whether the ordinary farmer, at all events in this country, will be competent to make much practical use of the principles expounded. The position of farming, especially in the older civilised States, has perhaps undergone more change during the last thirty years than that of any other great industry, since it is practically within this period that the cultivator has had to learn to face the competition, not merely of his own countrymen, but of the whole world. It is therefore all the more necessary that he should be thoroughly acquainted with the modern conditions under which he has to work; in this respect, the remarks on the importance, as a factor in prices, of the increased facilities for marketing the enormous quantities of grain and other farm products raised in the United States, are very much to the point.

*Lectures on Theoretical and Physical Chemistry.* By J. H. van't Hoff. Translated by R. A. Lehfeldt. Part ii. Chemical Statics. Pp. 156. (London: E. Arnold.)

WE welcome the appearance of the English translation of the second part of van't Hoff's lectures. Dr. Lehfeldt has, as before, done his work admirably. It may be regretted, however, that he has adhered so closely to the somewhat uncouth structural formulæ used by the author. We venture to hope that in a future edition a freer use of brackets and points may be made, as the student might have some difficulty in recognising aceto-acetic ether in the formula  $H_3CCOCH_2CO_2C_2H_5$ .