

A PHILOSOPHY OF MAN.

Die Schöpfung des Menschen und seiner Ideale. Ein Versuch zur Versöhnung Zwischen Religion und Wissenschaft. Von Dr. Wilhelm Haacke. Mit 62 Abbildungen im Text. Pp. x + 487. (Williams and Norgate, 1895.)

AN author who claims for his book that it is, "in its aim and substance, entirely new and original," does not prepossess a reader in his favour; nor do the contents of Dr. Haacke's book remove the prejudice. He seeks to prove that the mechanical conception of nature leaves room for faith in a moral order of nature, by showing that natural bodies and organisms, and human ideals alike follow a great law of tendency to equilibrium. The book is popular in character, and it has the merit of being very readable. It is partly and mainly biological, partly philosophical, and throughout speculative. Dr. Haacke will have nothing to do with Darwin or Prof. Weismann—not merely that he rejects pangenesis or the continuity of the germ-plasm, but natural selection as well. He substitutes an epigenetic theory of *gemmæ* or crystals of the germ-plasm, which have polarity and are united into a *gemmarium* (or collection of *gemmæ*) whose configuration seems to be determined by every influence which affects the organism. The theory, which is explained in full in the author's work "Gestaltung und Vererbung," is based on the assumed transmission of acquired characters. How unclearly he conceives the problem is shown by his description of an ideal test of that transmission (p. 344), which is no test at all, and by the confused treatment of inherited memory. Dr. Haacke thinks that in consequence of the organic connection of every part of the body, acquired characters may affect the configuration of the gemmarium, but he does not explain how the male gemmarium, when it passes from the parent body, should retain this configuration. The philosophical portion of the book is purely hypothetical. Each atom has sensation, and therefore, according to the sensori-motor law, also motion, which it exhibits in the tendency to equilibrium with other atoms. Schopenhauer's "will to live" is replaced by the "will to equilibrate." It is not clear whether the author supposes each brain-cell to have consciousness (which is psychological atomism with a vengeance). The most interesting portion of the book, from a philosophical point of view, is the slight sketch in which it is shown that art, morality, and religion exhibit the tendency to unite various elements into an equilibrium, that is, in simpler language, into an organic system. It is not, however, quite original, nor is it adequate. The author hopes to reconcile religion with the materialistic conception of nature in half a page, in which he declares the ideal of religion to be the equilibrium of all other ideals, and God to reveal himself everywhere as the tendency to equilibrium. From a purely speculative point of view, the author's doctrine is open to a grave objection. That every organic form which can maintain itself exhibits internal equilibrium is undoubted, and if Dr. Haacke had expounded this truth in its application to morality and knowledge with anything approaching adequacy, he might have done service. But it is quite another thing to assume a "tendency to equilibrium." How much truer

is the simple doctrine of Spinoza, that everything tends to "persist in its being"—*in suo esse perseverare*—a real tendency of which equilibrium is the result. Such a view is perfectly compatible with natural selection, which is the process by which bodies that cannot be in equilibrium under their conditions are eliminated. But Dr. Haacke apparently takes natural selection to be a force instead of a mere process according to which forces act, dismisses it for this reason, and sets up in its place an unreal striving after equilibrium, which equilibrium is only an effect. Of his purely philosophical quality the sample which the author gives in the concluding portion of his book does not induce us to recommend the book to the study of philosophers.

OUR BOOK SHELF.

Roads and Pavements in France. By A. P. Rockwell, A.M., Ph.B. Pp. 107. (New York: John Wiley and Sons. London: Chapman and Hall, Ltd., 1896.)

THE title of this book is hardly broad enough to do justice to the contents, which include general descriptions of construction and maintenance of roads, and of other points to be considered when building a new road or improving one already built. At the same time, all who have to do with road-making know that they can learn something from an account of the methods adopted by the highly-educated and able engineers whose work has resulted in the excellent roads of France to-day, and whose experience as to the best and most economical systems extend over more than a hundred years. The author has brought together the results of this instructive experience, and has thereby produced a work which will be of great service to road contractors and engineers in every country.

Single-Salt Analysis. By B. P. Lascelles, M.A. (London: Swan Sonnenschein and Co., Ltd., 1896.)

THIS addition to the already too numerous sets of tables for use in chemical laboratories, consists of fourteen cards containing instructions what to look for, and what to conclude, when conducting the various operations involved in the analysis of a simple salt. Five cards are devoted to stating dry tests, and the remainder are taken up with wet tests for a simple salt, soluble in water or acids. The cards will be useful in elementary chemical laboratories, where test-tubing is the order of the day; but we hope for a time when their use will be limited to students who intend to become analysts, for work conducted upon the lines laid down in these and similar analytical tables are of no educational value whatever.

The West Indies and the Spanish Main. By James Rodway. Pp. xxiv + 371. 48 illustrations. (London: Fisher Unwin, 1896.)

THE stirring events described in this latest addition to the "Story of the Nations" series are sufficient to furnish material upon which a score of romances might be built, even though Marryat, Kingsley, Stevenson, and other writers innumerable have made the Indies the arena of all the incidents attractive to adventurous spirits. So full of incident is the history of the West Indian Islands, that Mr. Rodway has had a difficulty in compressing his story within reasonable limits, and he has only been able to do so by giving preference to facts referring to the islands as a whole, and omitting events of interest chiefly to the communities of particular islands and provinces. Little is said about the islands from the scientific point of view, but as a contribution to historical geography the book is undoubtedly valuable; for few persons are better acquainted with the history of the progress and development of the Indies than the author.