

Intellectualism is the curse under which the author's friend fell, a martyr going at the last unwilling to his fate. To this we owe the degeneration held to be typically *fin de siècle*. We must meet the danger, exorcise the curse, by derogating from our claim to construe an absolute, and entering instead upon our heritage as men. "The Ideality of the life of feeling is the remedy."

Dr. v. Schoeler is undoubtedly fitted to write the history of philosophical and scientific ideas in certain fields. His chapter on matter, and his section on the achievement of nineteenth century surgery prove this. And his general power of appreciation and range of interest carry him a long way towards the adequate treatment of his encyclopædic task. But his rhetorical tendencies, shown, for example, in his interesting chapter on Nietzsche, and his exuberance, give the book an ineffectiveness which a smaller work might escape. And there is no index to a critique of all philosophy and all science, though laden on every page with citations!

H. W. B.

#### OUR BOOK SHELF.

*Les Plantes Utiles du Sénégal—Plantes Indigènes—Plantes Exotiques.* Par Le R. P. A. Sébire. Pp. lxx + 341 (Paris: J. B. Baillière et Fils, 1899)

RAPID strides have been made of late in opening up to commerce the several European possessions on the West Coast of Africa, and though much has already been done so far as vegetable products are concerned, only a small percentage of such products find their way regularly into European commerce, such, for instance, as palm oil, ground nuts, rubbers, chillies, and a few drugs, including kino, cinchona bark (introduced), strophanthus seeds, kola, &c.

With regard to timbers, there is a wide field for development, as there are many valuable woods in the forests that should find a ready market in Europe. African mahogany, afforded by *Khaya senegalensis* and other trees, is regularly imported into Europe, the trade in this timber having, during the last decade, increased enormously, and though it may lack the figure of Central American mahogany, it commands a ready sale in European ports. Taking into consideration all these facts, any contribution, however small, of the nature of the book under review must be accepted with thanks, so long as the facts and figures are trustworthy. In the preparation of the work the author's aim has been to provide those engaged in agricultural pursuits, or in the development of the vegetable economic resources of Senegal, with a manual of useful instruction. The book affords detailed information on indigenous plants, those that have become acclimatised, and further with those recommended for experimental cultivation.

The first forty pages deal with such subjects as the seasons, water supply, soils, injurious insects, &c., and is followed by a list of exotic economic plants cultivated in the country, with notes on the results obtained, the plants being classified according to their uses. Synoptical tables follow of generic and native names, together with a list of medicinal plants, arranged according to the diseases in the treatment of which they are employed. The main portion of the book, covering 300 pages, consists of a list of plants arranged under their respective natural orders, with scientific and native names and details bearing upon their properties, uses, and distribution. This portion of the work contains much valuable information, and bears evidence of zeal in its preparation. Besides dealing with indigenous and acclimatised plants, notes are given on various exotics

and their uses with the view to their introduction into the Colony, or as an aid in determining the properties of indigenous plants upon the assumption that allied species in a given natural order possess similar properties. This is an excellent idea, and adds to the usefulness of the work. An index of Latin and French names, together with lists of native names, complete the work. In a book of this description, written on the spot, one naturally expects to find errors. The scientific names in many instances are obsolete or incorrectly spelled, and due care has not been exercised in the introduction or omission of capital letters, italics, &c. It would have been much better had the information been concentrated under fewer heads, and a good general index of scientific and native names combined would have added to the utility of the book. This may be remedied in another edition, but as the work now stands it can be recommended with confidence to those engaged in the development of the vegetable resources of Tropical Africa as a very useful addition to the limited number of such books already existing. Many illustrations of interesting subjects are intercalated in the text.

J. M. HILLIER.

*Applied Geology.* By J. V. Elsdon, B.Sc. (Lond.), F.G.S. Part II. Pp. vi + 250, with 186 Figures. (London: "The Quarry" Publishing Co., Ltd., 1899.)

THE first part of this work was noticed in NATURE, vol. lviii. (1898), p. 615. The second part consists of eleven chapters and an appendix. The first chapter (Chapter vi. of the work) deals in 19 pages with unstratified ore deposits. In the following chapter (vii.) the occurrence of the non-metalliferous minerals is described. We have, for example, 2½ pages on coal, 1½ on petroleum, and 1 on diamonds. As these pages include the illustrations, it is clear that the amount of information is completely out of proportion to the importance of the subject. No doubt the author would plead the lack of space for more, but surely in that case he should have made a judicious selection of the literature bearing on the subjects in question, and given full references to it. The same remark as to the almost complete absence of references applies to the book as a whole. Not only would such references have rendered useful short sketches of great subjects, which, standing alone, are almost useless, but they would have given the weight of authority for many statements which, unsupported, appear dogmatic. Chapter viii. is devoted chiefly to prospecting, developing, bed-mining, and vein-mining. The next four chapters deal with "Building and Ornamental Stones." They are chiefly illustrated by sixteen drawings of microscopic rock sections, clearly executed but without any indication of the amount of magnification. On p. 76 the igneous rocks are classified into three groups—Plutonic, Intrusive and Volcanic; but it by no means follows, as there stated, that intrusive rocks are microcrystalline, still less that volcanic rocks are necessarily partly or entirely glassy, nor is it logical to classify serpentine as intrusive, while peridotite, of which most serpentines are merely altered examples, is termed plutonic. Rocks used in the arts and manufactures are described in Chapter xiii. Engineering geology, especially the subjects of water-supply, embankments, tunnels and cuttings, occupies Chapters xiv. and xv., and the final chapter is devoted to surface features such as soils. In an appendix are given "simple rough methods for the determination of minerals and rocks," and there is a good index.

The work is very readable, well illustrated, and suited for geological students who wish to learn some of the applications of the science. The practical man will also gain useful hints, though he will feel rather at sea in reading some of the petrographical descriptions, and will wish for more details or references on many practical points.