

a calculation on p. 67, where the maximum current obtainable between two electrodes of constant potential difference, but variable distance, is deduced from the condition that the differential coefficient of the current with respect to the *time* should be zero.

French books are apt to err in matters of typography, but such an abundance of misprints and misspellings cannot be left unnoticed; Prof. Townsend comes in for specially hard treatment. On the other hand, we are accustomed to expect French authors to redeem these deficiencies by a graceful literary style; but M. Manville's aberrations would be hardly tolerated in England. It is with great regret that we have to express our opinion that a design contemplated so wisely should remain still in need of successful execution. N. R. C.

OUR BOOK SHELF.

The Oceanic Languages: their Grammatical Structure, Vocabulary, and Origin. By Dr. D. Macdonald. Pp. xv+352. (London: Henry Frowde, 1907.) Price 10s. 6d. net.

In this volume, Dr. Macdonald sets forth the proposition that the Oceanic languages originated in the Arabian peninsula, and are thus cognate with the Semitic tongues. The primitive Oceanic he regards as a sister language of Arabic, Himyaritic, Ethiopic, Assyrian, Phœnician, Hebrew, and Aramaic, and Efate, Samoan, Malagasy, Malay, &c., as cousins of the modern Semitic dialects. He regards the people speaking the Oceanic languages in Madagascar, the Malay Archipelago, Melanesia, and Polynesia as one great, though diversified, race or people, and the languages themselves as constituting one great family. This unity of race is, however, negated by the known ethnological data.

Although entitled "The Oceanic Languages," the work is mainly a dictionary of the Efate language of the New Hebrides, preceded by a discussion on the phonology, trilateralism, word-building, pronouns, and particles of the same language. These grammatical elements are compared with those of the Semitic languages taken collectively, so as to show a correspondence of forms. There is no attempt to give a comparative grammar of the Oceanic languages, though some few languages of the region, mainly Malagasy, Malay, other New Hebrides dialects, and Polynesian, are dealt with partially. In the absence of a comparative treatment of the Oceanic languages, some statements, such as those relating to the loss of gender in Oceanic pronouns (p. 75), the modern use of plural pronouns for singular, the representation of the Semitic nunation by final *na* or *n* in Malagasy and Malay (p. 92), are open to doubt, and cannot be accepted without some adequate proof being given.

The work is well printed, but it would have been better to print all the Semitic words in Roman character instead of occasionally using the Ethiopic, Syriac, Arabic, or Hebrew characters without transcription. In the preliminary (grammatical) part of the book there is a large amount of cross-reference, by which the illustration of some statement has to be sought in hundreds of places in the body of the book. In the dictionary, comparison of the Efate words is more fully made with the Semitic than with the Oceanic tongues, and here there are also numerous cross-references.

In conclusion, it may be said that the similarity of form in words and particles which Dr. Macdonald

has shown in Efate and Semitic is no proof that they were originally the same, and exactly the same method has been employed to affirm the relationship of the Oceanic languages to Aryan, Australian, and American. The history of the Oceanic languages, as a whole, must be traced out before the apparent affinities of one of them can be held to establish a relationship of the whole group to some other linguistic group. S. H. R.

Searchlights: their Theory, Construction, and Application. By F. Nerz. Translated by Charles Rogers. Pp. vii+137. (London: Archibald Constable and Co., Ltd., 1907.) Price 7s. 6d. net.

THE use of searchlights has rapidly extended during recent years, with the result that the want of a good treatise, dealing with their principles of construction and the methods of using them, has made itself acutely felt. The volume at present under review is a translation of the treatise on searchlights in Prof. Voit's "Sammlung elektrotechnische Vorträge," but much new matter has been added, so that it now forms an epitome of the latest practice. After dealing with the optical principles utilised in the construction of searchlights, special attention being paid to parabolic mirrors, the performance of searchlights and the methods of testing their mirrors are discussed. The applications of searchlights in the field, in land fortresses, for coast defence, and on battleships then receive attention. For field purposes a light equipment is now obtainable, consisting of a waggon carrying a petrol motor and a dynamo, coupled to another waggon which carries the searchlight and a transportable tower for elevating it. Searchlight equipments for fortresses may be either fixed, partially movable, or wholly movable; each type receives adequate consideration.

For coast defence, special arrangements, such as dispersers, are sometimes required, and these, in their turn, necessitate special protecting devices. Searchlights are indispensable to a battleship; without their aid a night attack of torpedo boats could not be repelled, hence the application of searchlights to naval purposes receives very careful consideration. The details of construction are then described and illustrated, attention being paid to the different forms of arc lamp, their method of control, and the various optical accessories which form part of a complete equipment. The scientific principles utilised are so carefully and lucidly explained that they will be readily understood by one who has previously had little acquaintance with them. Various forms of transportable power supply are described and illustrated in the last chapter, and the book ends with an appendix which briefly describes the physical units used in photometry. No book could meet the want which led to its compilation better than this one does. E. E.

Beyond Good and Evil. Prelude to a Philosophy of the Future. By Friedrich Nietzsche. Authorised translation by Helen Zimmern. Pp. xv+268. (Edinburgh and London: T. N. Foulis, 1907.) Price 5s. net.

"ALL prudent, worldly wise men follow more or less approximately the practice which Nietzsche teaches, notwithstanding the opposite principles which they perhaps profess to hold," says Mr. Thomas Common in an introduction to this translation, and it will interest and instruct those who are unfamiliar with Nietzsche's philosophy to read what the philosopher has to say here on the natural history of morals and other subjects. No reader will complain that there are not questions enough for thought raised.