After a three page introduction on trigonometry (where the ratios are defined analytically), the reader is plunged at once into the main topic of the book—orthogonal substitutions. In the conclusion half a dozen pages are devoted to some general remarks about groups of substitutions. A definition of a group is given, and the statement is made that the orthogonal substitutions form a group. In the next paragraph the author says that all possible geometries are, fundamentally, the study of groups of substitutions and their invariants. Should this most important fact be relegated to the conclusion and there passed over lightly? May not the student regard it as a mere afterthought? Is it one of the conclusions that have necessarily arisen in his mind during the study of this book? Indeed, one fears that he would not have sufficient breadth of view to appreciate the meaning of the sentence.

Another criticism that must be made is in regard to the absence of any trace of a bibliography. It may be unnecessary to give references in secondary school books (though one can certainly raise the question even there); but it does seem most unwise to omit from a text of this nature all reference to the literature of the subject. E. B. COWLEY.

Tafeln unbestimmter Integrale. Von G. PETIT BOIS, Bergingenieur in Lüttich. Leipzig, Teubner, 1906. 4to. xii + 154 pp.

THE book contains 2,500 or more indefinite integrals, unnumbered. This is five times as many as occur in B. O. Peirce's Short Table of Integrals, but the latter would be, in general, the more useful book on account of its containing also definite integrals and many auxiliary formulas. In the three-page index to the Tafeln are given the 110 groups into which the formulas are divided. About three-fourths of the integrals are of algebraic functions. As an introduction, there are 49 transformation formulas. The books most used in the compilation were those of Schubert, Minding, Sohncke, Frenet, Graindorge, Brahy, Gregory, Roberts, and Carr. EDWARD L. DODD.

Annuaire du Bureau des Longitudes pour l'An 1909. Paris, Gauthier-Villars.

THE volume of the Annuaire for the current year is without the chemical and physical constants and certain astronomical tables which are inserted in the even-numbered years. As usual