

sented as the sums of two k th powers, and the reflection of electromagnetic waves on a parabolic cylinder, show the wide range of applications of these functions.

A table of Laplace transform pairs involving confluent hypergeometric functions, the list of references mentioned above, and an index conclude this excellent volume.

The printing is excellent, and very few misprints were noted by this reviewer. Tricomi's book is the first volume in a new series of mathematical monographs sponsored by the Italian *Consiglio Nazionale della Ricerche*. It is a promising beginning, and in wishing the new venture every success, one can hardly do better than express the hope that future volumes of the series will be as useful and as readable as Tricomi's book.

A. ERDÉLYI

The language of taxonomy—An application of symbolic logic to the study of classificatory systems. By J. R. Gregg. New York, Columbia University Press, 1954. 9+70 pp. \$2.50.

The subtitle and almost every page of this little book hold forth promise to mathematicians on the alert for radical new applications of mathematics, but I fear that they will be rather disappointed. The specific subject matter seems dry and relatively unimportant for mathematicians and biologists alike; the method chosen by the author seems ineffective and tedious; there are scarcely any interesting arguments or deductions presented or alluded to; and the final results are meager.

The general problem of classifying a vast set of objects has many aspects of intellectual and perhaps of mathematical interest, especially when the objects are organisms, with their phylogenetic connections. This book is confined to discovering a description of the formal, set theoretic, structure of the biological taxonomic systems in actual use, completely abstracted from how these systems depend on the structure and phylogeny of organisms. For example, it is within the scope of the book to say that a species is a set of organisms and a genus a set theoretic union of species but not to say when two organisms should be assigned to a common species or genus.

As the author says, biologists have over the centuries evolved a remarkably accurate and effective language for describing the forms of organisms, but they have as yet no special language for talking about taxonomic systems, as opposed to talking taxonomy. The author seeks to supply the missing language with the aid of symbolic logic. I believe he would have done far better to look to a powerful,