it any convincing theme for which papers have been sought to support, although the editor has attempted to superimpose a theme on the material that happens to be at his disposal. It might have been preferable if the better papers had appeared in appropriate journals with the others remaining unpublished.

R. G. DYSON

Non-Linear Programming—Theory and Methods

BÉLA MARTOS

North-Holland U.S.A./Netherlands. 1975. 280 *pp.* $20.95.

In this book, Béla Martos has given a rigorous account of what he considers to be the most important topics in the theory and methods of nonlinear programming. The book is divided into two parts, both of which include some of the author's previously unpublished work.

The first part (Theory) includes a detailed account of sets and functions, Lagrangian saddle points and Kuhn–Tucker theory. In many places, the usual theorems concerning convex functions are proved under the weaker assumption of quasiconvexity or pseudoconvexity.

Part Two (Methods) opens with a short chapter on the simplex method of linear programming, on which most of the algorithms in the subsequent chapters are based. The topics covered include adjacent vertex methods, quadratic programming, gradient methods and cutting plane methods. Almost every algorithm is illustrated with a numerical example.

The author has attempted to make this book self-contained by proving theorems without references to outside sources. Consequently, Part One contains a certain amount of material that one would expect to find in a text on mathematical analysis rather than one on nonlinear programming. For this reason, the book may not appeal to those who are less mathematically inclined. The presentation is good, there are few misprints, and apart from p. 53 where he confuses "for some k" with "for all k", the book is well written. I would recommend this book to anybody working in nonlinear programming or related areas at the research level.

A. G. MUNFORD

A Decision-Theoretic Approach to Insurance Rate-Making

L. R. FREIFELDER

Richard D. Irwin, U.S.A. 1976. 141 *pp.* $9.95.

In most lines of insurance, rate-making has been and continues to be based primarily on the statistical concept of expected value. Expense charges and