larger than the number of independent references, but it is still striking testimony to the industry of the author. The book is truly a comprehensive work and a boon to the literature searcher.

The larger type and other changes in styling have given the volume a distinctly improved and attractive appearance. It is well illustrated.

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La Végétation de Kaniama (Entre-Luishi-Lubilash, Congo Belge). Série Scientifique No. 61. William Mullenders. Institut National pour l'Etude Agronomique de Congo Belge, Brussels, Belgium, 1954. 499 pp. Illus. + plates. Paper, F. 180.

This book presents the results of the botanical part of a detailed pedo-botanical survey of an irregular area of several hundred square kilometers in south-central Belgian Congo. The Braun-Blanquet system of formally named, hierarchically arranged vegetational units is used throughout. Twenty-nine such units are recognized, of which several are "new." As with other treatments in which the units of vegetation are so finely and (to judge from the maps) precisely divided, the status and significance of these units in relation to a larger region are obscure.

The evidence from the area studied is considered to corroborate the view, previously advanced by others, that the extensive savannahs in the Belgian Congo lying between the equatorial forests and the more southern, dry and open forests are anthropic rather than climatic, with fire as a principal factor. Two main climax types, both dense forests of Guinean affinities, are recognized in the area, correlated with the nature of the soil and underlying rock. These forests are now largely destroyed and replaced by savannahs rich in Sudano-Gambesian elements.

Eight hundred sixty-five species of vascular plants are recorded from the area, each represented by one or more collections deposited at the herbarium of the Institut National pour l'Etude Agronomique du Congo Belge, at Yangambi, C.B., and at the Jardin Botanique de l'Etat, Brussels. The identifications have been carefully done, with the help of well-known specialists in some groups.

Mullenders' detailed, thoughtful, and technically competent work provides some of the basic data toward an understanding of the vegetation of tropical Africa.

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Deterioration of Materials. Causes and preventive techniques. A collaboration under the joint auspices of the Service Technical Committee of the Department of Defense (contract No. N7-mr-29127) and the Prevention of Deterioration Center, Division of Chemistry and Chemical Technology, National Academy of Sciences–National Research Council. Glenn A. Greathouse and Carl J. Wessel, Eds. Reinhold, New York, 1954. xvii + 835 pp. Illus. $12.

Deterioration of materials is constantly going on around us, but only when we are faced with the cost of a repair or replacement do we give the matter much thought. That deterioration of materials associated with our daily life and our industries is important is highlighted by the conservative figure of $12 billion, exclusive of foodstuffs, used by the editors of this book in assessing the nation's annual loss.

World War II was instrumental in demonstrating to our government, industry, and men in the armed services the terrific cost potential of deterioration. As a result, attention was focused on the entire problem. Problems of decay, corrosion, water damage, and weathering, which had been present but not extremely acute in our temperate zone, assumed tremendous importance when we were fighting a global war, with men and materiel exposed to all the known extremes of climatic conditions.

In compiling the most up-to-date information on deterioration in one book, the editors hope that it will serve as a guide to those engaged in the handling of materials everywhere as well as stimulate further research in unsolved areas of deterioration. Some of this information has been known for years and has been published in various journals and books, other data are the result of recent research dating from the early 1940's.

Each chapter was prepared by one or more specialists in the field, and the authors are to be complimented on striking a happy balance between condensation and information, while at the same time presenting their material in a readable, logical way. Those interested in a single material or a single aspect of deterioration may feel that too much has been sacrificed for brevity's sake. However, for those who wish to pursue a subject further, a list of literature citations and, in some instances, an additional bibliography included at the end of each chapter will be of great value.

Although it would be unjust to say that any one part or chapter was more important than the others, I wish to call particular attention to those chapters in part I that so clearly set forth some of the factors that bring about deterioration. Solutions to deterioration problems come only through an understanding of those climatic, chemical, physical, and biological factors and an appreciation of their importance.

Part II is concerned with individual materials and their reaction to the several factors of deterioration. In general, the problem of deterioration prevention is somewhat simpler when one deals with individual materials than when several materials are brought together in one unit. Part III describes the deterioration problems and the prevention methods that have been developed for two general classes of assembled units.

The three chapters in part IV deal with quite diverse subjects, but all are important in the over-all field of deterioration. "Dehumidification," the title of Chapter 13, is not particularly informative. The chapter deals with storage of materials in a relatively dry atmosphere. Techniques developed by the U.S. Navy, which is successfully using this preservation method for both ships and warehouse-stored material, are described.

The appendix deserves mention because it gives information on sources and identifying symbols of government specifications.

The editors and authors are to be complimented on gathering this information into one volume. The book should be of value to all who are in any way concerned with deterioration, whether in industry, research, or government service. As one who was associated with packaging of war materiel during World War II, I only wish that such a book had been available in 1942.

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Contributions to the Theory of Partial Differential Equations. L. Bers, S. Bochner, and F. John, Eds. Annals of Mathematics Studies, No. 33. Princeton Univ. Press, Princeton, N.J., 1954. vi + 257 pp. Paper, $4.

In October 1952 a conference on partial differential equations organized and sponsored by the National Academy of Sciences–National Research Council was held at Arden House, Harriman, N.Y. Fifteen papers presented there and subsequently submitted for publication are collected in this volume. Their authors are well-known specialists in the field of partial differential equations connected with various American universities: Bergman, Bers, Bochner, Browder, Diaz, Douglis, John, Lax, Leray, Loewner, Milgram, Morrey, Nirenberg, Protter, and