ment of a theme but refers the student to a German reference. Not only does he overestimate the language training of our high-school graduates but their training in mathematics as well.

The author has not taken the trouble to become acquainted with the American literature. He refers to the *Monthly Weather Review* scarcely a half dozen times, yet for many years it was a primary source of material on climatological methodology. By way of contrast, we may cite the work of Geiger,[2] one of his former colleagues, who obtained 60 out of a total of 82 references to frost from the *Monthly Weather Review*. Apparently the author has not examined the few citations to American literature that he has included. For example, he says (p. 95) that he could not find a proper definition of killing frost in the available literature and quotes a definition given to him by a colleague. The quoted definition is a paraphrase of one by W. G. Reed in "Frost and the Growing Season," a part of the Atlas of American Agriculture, to which the reader is referred. Only in one other place, in a footnote in the conclusion of the book, does he cite the Climatic Section of the Atlas of American Agriculture. Here he calls it a "monumental work" and promises the reader "a rich source of different methods of representation," but he cites the work incorrectly and does not mention J. B. Kincer, the author of the principal parts.

No book for use in this country dealing with the application of statistics to climatology should fail to make use of the innumerable articles that have appeared in the *Monthly Weather Review* during the last 30 years.[3] Perhaps Professor Conrad intends to issue a second edition of his book. If so, it is hoped that he will become acquainted with our literature and consider the needs of our students during its preparation.

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## THE CHEMICAL FORMULARY

*The Chemical Formulary.* Vol. VII. By H. Bennett, editor-in-chief. xxxii + 474 pp. Brooklyn, N. Y.: Chemical Publishing Company, Inc. 1945. $6.00.

This is the seventh volume of the series, and as in previous volumes the editor-in-chief has had the assistance of an editorial board of about fifty assistant editors in industrial and educational organizations. A footnote to the preface states that all the formulae in volumes I to VII are different except for a few typical cases used in the introduction to illustrate directions and advice for new users of the volumes.

The fields covered in the present volume include adhesives, beverages, cosmetics, emulsions, foods, inks, lubricants, materials of construction, metals and alloys, paints and varnishes, pyrotechnics and explosives, rubber, plastics, detergents, textiles, etc.

The directory of sources of chemicals and supplies in the present volume now numbers 606 sources. This will prove of value to users of the volume, since many of the substances mentioned in formulae throughout the book are trademarked or copyrighted "trade names" and could not be secured on the open market either by reason of their compound nature or secret composition. The editor feels justified in including such substances, since without them many ideas and processes offered in formulae of specialty producers would have been automatically eliminated.

A large number of the formulae and compositions presented in the present volume are taken from the patent literature. In most cases the original patent number is given so that users of these formulations may refer to the original sources. Those who are familiar with the use or application of such formulae will recognize the generally limited usefulness of such patented disclosures.

Tables of weights and measures, a list of foreign sources of chemicals and an index of nearly 2,000 entries complete the present volume. Previous volumes have been widely reviewed in technical and trade publications such as *American Dyestuff's Reporter, Electrochemical Society Bulletin, Modern Plastics, Rubber Age,* etc., and have received favorable comment. The present volume is a timely addition to the series and will doubtless find wide acceptance among chemists and technologists throughout the industry.

Volume VI has been reviewed in Science, and previous volumes have been widely reviewed in technical and trade publications and have received favorable comment.

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## BOOKS RECEIVED

*Proceedings of the American Philosophical Society.* Pp. 542. The American Philosophical Society. 75¢. 1945.

*Universidad de Antioquia, Numeros 71–72.* Pp. 584. Colombia.

[2] Rudolf Geiger, Das Klima der bodennahen Luftschicht. Die Wissenschaft. Vol. 78, Braunschweig, Vieweg, 1927.

[3] A single volume of the *Monthly Weather Review* (v. 44, 1916) contains the following articles: C. F. Marvin, "Elementary Notes on Least Squares, the Theory of Statistics and Correlation, for Meteorology and Agriculture. Vol. 44, Oct., 1916, pp. 551–569; William Gardner Reed, "Weather Insurance," Vol. 44, Oct., 1916, pp. 575–580, and "The Probable Growing Season," Vol. 44, Sept., 1916, pp. 509–512; William G. Reed and Howard R. Tolley, "Weather as a Business Risk in Farming," Vol. 44, June, 1916, pp. 354–355; W. J. Spillman, H. R. Tolley and W. G. Reed, "The Average Internal Curve and its Application to Meteorological Phenomena," Vol. 44, Apr., 1916, pp. 197–200; Howard Ross Tolley, "Frequency Curves of Climatic Phenomena," Vol. 44, Nov., 1916, pp. 634–642.