In general, the excellence attained in the first two volumes is maintained in this one. Particularly outstanding is the treatment of *p*-aminobenzoic acid and pteroylglutamic acid. More than 200 pages are devoted to these related vitamins, an indication of the thoroughness attempted. Despite this thoroughness, a few literature oversights were noted together with several minor errors in structural formulas. A shortcoming apparent in this volume, in contrast to the earlier ones, is a more limited use of gross and histological photographs in association with the pathology of the specific vitamin deficiencies. Tables on the occurrence of certain vitamins, particularly of pteroylglutamic acid, pyridoxine, and *p*-aminobenzoic acid, should be of value to nutritionists. However, a more detailed presentation of the occurrence of several of the other vitamins would have seemed desirable.

With the publication of this final volume, a very excellent series of reference books on the vitamins is now available and should be most welcomed by biochemists, nutritionists, and other investigators.

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Dictionary of Mathematical Sciences, English-German. vol II. Leo Herland. Ungar, New York, 1954. 336 pp. $4.50.

The first volume, German-English, of this dictionary was published some time ago.

The designation, "mathematical sciences" is here taken quite broadly to include statistics (entries by Gregor Sebba) and commerce (entries by Robert Grossbard). One might well expect the statistics, but possibly not the commerce. In addition, there are entries identified as arising from acoustics, architecture, astronomy, aviation, ballistics, cartography, chemistry, crystallography, electricity, electronics, engineering, finance, geography, geology, insurance, logic, magnetism, meteorology, optics, and physics, not to mention the several branches of mathematics proper.

The lexicographer's lot is not an easy one, and at least this particular nonlexicographic reviewer would stand in some awe before the mere task of deciding which entries to include and which to omit. For example, there is an entry *paralogism,* but none for the antonym *sophism.* Certainly, if either term is to be left out, it should be *sophism.* One can think of arguments both pro and con, or the omission could have been an oversight. This is a trivial example. On the other hand, there are entries for the suffixes *-digit, -sheeted, -sided,* but none for such ubiquitous prefixes as *poly-, mono-, bi-, deci-, centi-,* and *mega-.* In fact, if there are any prefixes, they are very few. There are some proper names and adjectives derived therefrom: *Boyle, Galois,* and *Galton,* but neither *Boole* nor *Boolean.* The use of *proper,* as in *proper value* and *proper vector,* is not recognized. Throughout there are innumerable decisions to be made. The criteria are not always clear, but none of the omissions would seem to impair the utility of the result to any extent. These points, therefore, are made, merely for descriptive purposes and with no implied criticism.

On the positive side, the most noticeable feature of the *Dictionary* is the great abundance of cross references. For example, under the single entry *field* there are 50 cross references. This is, of course, extreme, but indicative. Another feature is the abundance of phrases, each listed under the most important word of the phrase, be it substantive or modifier. One wonders at times about the selection of key words; thus, *health insurance* is a separate entry, but *group insurance* comes under *insurance.*

No pronunciations are given except for an occasional accented syllable in German words. English words are separated etymologically (not by syllables), but the etymologies themselves are not given. English parts of speech and genders of German nouns are included. Indication is made where a usage is peculiar to American or British English, as in the inelegant American use of *billion* and *trillion.* The arrangement throughout, including the preface in both English and German, is such as to make this book equally usable to readers of German or English.

Three typographic errors have been noted, none of which could cause confusion. Altogether, the volume should prove extremely useful both to the German speaker reading English and to the English speaker attempting to write in German.

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Mathematics in Type. William Byrd Press, Richmond, Va., 1954. xii + 58 pp. Illus. Paper, $3.

It is unfortunate that few authors of papers or books on mathematical subjects know so little about the possibilities or limitations in mathematical composition. The staff of the William Byrd Press made a thorough study of the problem, during which it sought the advice of many organizations, and now presents a plea for foresight on the part of an author in his use of mathematical symbols.

A machine is limited in what it can economically do; a mathematician seems to possess unlimited inventiveness so far as symbolism is concerned. Unless an author does use good judgment in his writing, the cost of composition for his paper or book will be great.

By means of well-chosen examples and clear exposition, this small book presents excellent advice. The type face itself is that used in many mathematics publications. This adds to a reader's visual concept of what a printer can do with his manuscript. In the discussion of preparation of a manuscript, any mathematician will find suggestions that will save himself, his editor, and his printer much work.

On page 15, "totalling" sent me rummaging for a dictionary. The tradition of the impossibility of pub-