let's class-number formula, and (7) an exposition (without proof) of the Thue-Siegel theorem.

Although this book is not written as a textbook but rather as a work for the general reader, it could certainly be used as a textbook for an undergraduate course in number theory and, in the reviewer's opinion, is far superior for this purpose to any other book in English. Admittedly there are no formal lists of problems, but there are plenty of problems implicit in the text in the form of easy proofs and calculations left to the reader; also there are many hints for further discussion or further reading. Students will certainly like the author's facility in presenting new concepts and proofs clearly without introducing elaborate notations.

Finally the reviewer believes that this book should be in every college library worthy of the name, regardless of whether or not there is a course in number theory in the curriculum. It is hard to think of a better book to suggest to an interested undergraduate for independent reading.

P. T. BATEMAN

Éléments de mathématique. By N. Bourbaki. Book II, *Algebra*. Chaps. I–VII. (Actualités Scientifiques et Industrielles, nos. 934, 1032, 1044, 1102, 1179.) Paris, Hermann, 1942, 1947, 1948, 1950, 1952.

Our time is witnessing the creation of a monumental work: an exposition of the whole of present day mathematics. Moreover this exposition is done in such a way that the common bond between the various branches of mathematics becomes clearly visible, that the framework which supports the whole structure is not apt to become obsolete in a very short time, and that it can easily absorb new ideas. Bourbaki achieves this aim by trying to present each concept in the greatest possible generality and abstraction. The terminology and notations are carefully planned and are being accepted by an increasing number of mathematicians. Upon completion of the work a standard encyclopedia will be at our disposal. The volume on *Topologie générale* which is complete is already being used enthusiastically, especially by the younger generation. A comparison with the "Encyclopädie der mathematischen Wissenschaften" should not be made. The aim was different; proofs were omitted and each article was written by a different author.

I hope that this work will continue in the same spirit and with the same vigor. I would suggest an English translation.

The volumes on algebra that have appeared show the same general features as the rest of Bourbaki. Numerous exercises, many of them