so inadequately covered in the American series. Crowther and Whiddington give an interesting, though somewhat fragmentary, discussion of early developments, and a very clear presentation of the scope and methods of this new branch of applied science. A number of examples of the application of the methods are given, then a discussion of general principles which is adequate, though not as complete or satisfactory as the famous articles of Blackett and of Goodeve.

The discussion on the atomic bomb adds nothing beyond what is contained in the Smyth report, other than a bit more detail of the British contributors and their early activities before coming to the United States to work for the Manhattan District.

The chapter on "Science and the Sea," on the other hand, contains much on mines and minesweeping that is not to be found in American books. This is, of course, owing to the fact that our forces had very little trouble with mines, whereas the British suffered considerable loss, especially because of the magnetic mine, which they had solved and countered before our entry into the war. The discussion of submarine detection is brief, but fairly complete.

On the whole, this book is a readable and interesting volume, a useful complement to our own reviews.

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***Blood transfusion.*** Elmer L. DeGowin. Robert C. Hardin, and John B. Alsever. Philadelphia-London: W. B. Saunders, 1949. Pp. xii + 587. (Illustrated.) $9.00.

A valuable if expensive lesson from the recent World War was the important uses of blood, plasma, and plasma derivatives in the specific therapy of many conditions previously treated only symptomatically if at all. The very low mortality in the members of the armed forces in this war has been credited in part to the free use of these materials. When the many experienced physicians returned from military service to civilian practice, they demanded more blood and blood fractions for everyday surgery, emergency medicine, and replacement therapy. This has lead to a considerable increase in blood banks and a great demand for many more.

To answer the many questions which the physician asks regarding blood transfusion, there has been an unusual paucity of authoritative and up-to-date text books. The appearance of *Blood transfusion* by DeGowin, Hardin and Alsever can justifiably be acclaimed as the answer to many a physician's prayer and a standard source of information which should help the everyday practitioner, the beginner in blood bank work, and the experienced director of such an operation who encounters problems of management.

It is well to know the authoritative background for this book. Elmer L. DeGowin has been, for almost ten years, the director of a large blood transfusion service and has served as a member of the important Committee on Blood and Blood Derivatives of the National Research Council. Robert C. Hardin was senior consultant in blood transfusion in the European Theatre of Operations and in charge of the European Theatre of Operations Blood Bank in Paris. John B. Alsever had considerable experience as director of the Blood Plasma and Blood Donor Services for the Office of Civilian Defense and the American National Red Cross during the war.

Such a wealth of personal experience cannot help but yield valuable information on blood transfusion, blood bank management, and allied problems. In addition, the authors have reviewed the literature comprehensively and bring a widely scattered bibliography up to date.

If any criticism of this much-needed text is possible, it is that recent advances in this field are continuing so rapidly that already new techniques and new therapeutic possibilities not described here are being exploited. The chapter on the use of blood derivatives, one of the most challenging advances in medicine, is too brief in view of these recognized future possibilities.

It is hoped that this volume will be as widely read as it needs and deserves to be and that new editions will keep the book in its present position of absolute leadership in this field.

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***Contribution a l'Etude de la Structure Moléculaire.*** (Volume Commemoratif Victor Henri.) With prefaces by L. Brillouin and J. Duchesne. Liège, Belgium: Maison Desoer, 1947–1948. Pp. xiii + 314. (Illustrated.)

Victor Henri will long be remembered for his significant contribution to the experimental work in molecular spectroscopy. His death, while he was working as a physicist in the service of his country, came at a time when there was little time to pause and pay respect to his memory. His former students and colleagues resolved, however, when times again became more normal, to memorialize his contribution with a volume of works in the field where he had served as so great a stimulation. This volume of papers is entitled *Contribution to the study of molecular structure* and contains 26 contributions by 36 authors, in addition to two prefaces by L. Brillouin and J. Duchesne.

It is not possible in a review of this nature to comment critically on a compilation of so great a diversity. One cannot avoid, however, observing that the list of authors is studded with stars from the field of molecular structure and molecular spectroscopy. Some of the authors are physicists, some are chemists; some are experimenters and some are theoretical scientists; but all are well known in an international sense.

The volume represents a compilation that every student of the structure of molecules will want to possess and will want to refer to again and again in his more creative work for many years to come. It should, therefore, admirably serve its purpose, namely, to keep the name of Victor Henri alive among the men who serve where he left off.

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