and the American Electrochemical Society. The section devoted to radium and radio-active bodies is very instructive and exceedingly entertaining. In the letter to the author, M. Curie writes, "Where is the source of this energy? Both Mme. Curie and myself are not able to go beyond hypotheses. One of these consists in supposing the atoms of radium evolving and transforming into another simple body and, despite the extreme slowness of that transformation, which cannot be located during a year, the amount of energy involved in that transformation is tremendous."

Every chemist will find in the various paragraphs in this book much material for reflection. Having studied the data here submitted and read Barker's most interesting fasciculus entitled "Radio-activity and Chemistry," he will have had brought to him a very complete and accurate account of the marvelous results which have been noticed in recent years, along lines which he probably never dreamed could include his beloved and simple atom. It is said the lamented Rowland once remarked, "that a Steinway grand piano was a comparatively simple piece of mechanism compared with an iron atom." It would indeed seem after perusing the pages of Mr. Hammer's book, as if not only the iron atom, but the atoms of many more of our elements were not only complex, but were undergoing a subtle and constant change.

The second section of Mr. Hammer's book gives in a very succinct form most interesting accounts of the properties and application of selenium, while in the third section there is presented briefly, it is true, but at the same time most interestingly, an account of the treatment of diseases by ultra-violet rays. It is here that a description of the Finsen Institute at Copenhagen is given with a description of the treatment of Lupus vulgaris.

This publication deserves to be widely read because of the new facts which it presents and because of its suggestiveness. Certain typographical errors appear, but these will no doubt be corrected in a subsequent edition of the book. EDGAR F. SMITH.

DIE CONSTITUTION DES KAMPHERS UND SEINER WICHTIGSTEN DERIVATE, VON OSSIAN ASCHAN. Braunschweig: Friedrich Vieweg und Sohn. 1903. pp. xi + 117.

So many workers have busied themselves with the subject of camphor, and the material accumulated has become so com-

plicated, that such a book as the present one is very welcome. Without attempting to give any details as to physical properties or methods of preparation for the derivatives of camphor, it does give a very clear oversight of nearly all of the relationships among those compounds which are important in establishing its structure. The work includes: 1, A brief statement with regard to each of the thirty-three formulas which have been proposed for camphor (or for camphoric acid); 2, a summary of the facts which must be considered in deciding what is the true structure; 3, a criticism of the formulas which have been proposed. This criticism demonstrates, conclusively, that of all the formulas proposed Bredt's is the only one which can now be considered as possible; 4, a consideration of other important decomposition products of the camphor; 5, a discussion of the structure of camphene and borylene.

When we consider the very large number of compounds which must be spoken of in such a discussion and the confusion which exists in the nomenclature of some of these bodies, it would seem almost impossible to avoid some mistakes. Very few have been noticed. The most important are the following: On page 61, α-dihydrohyhroxy-β-campholytic acid is spoken of as identical with [γ]-dihydrohydroxy-α-campholytic acid; on page 57, Walker's "allocampholytic acid" is called "α-campholytic acid"; and on page 68, the active α-campholytic acid is not properly distinguished from the racemic form of the same compound.

The student who is interested in the special study of camphor will find the book a most useful summary of our present knowledge of the subject, and the general student can scarcely find a better illustration of the nature of the work which must be done for the determination of the structure of a complex organic compound. And the fact that the solution of the problem which has been reached has the support of every one familiar with this particular field, in spite of the diversity of opinion which has prevailed till very recently, demonstrates that very positive results have finally been obtained. W. A. NOYES.

L'ACÉTYLÈNE. THÉORIE. APPLICATIONS. BY MARIE-AUGUSTE MOREL. Paris: Libraire Gauthier-Villars. 1903. 8 vo. xii + 169 pp.

This book is written by an engineer and gives a thermochemical and mathematical treatment of its subject. Its contents are well