intricate geological problems, is exceedingly favourable ground for the development of an interest in geology, not only from a purely scientific, but also from a commercial standpoint. That such an interest was abundantly manifest in the earlier half of the last century is shown by records of numerous courses of lectures at the various public institutions, and by attempts to found a geological society both in 1840 and 1850. The latter venture lasted but a year, the earlier not so long.

The present society, with the history of which the handsome volume now under review is concerned, grew out of a "Young Men's Society" connected with Free St. Peter's Church. It was inaugurated on May 17, 1858, by eight young men, and by the end of its first summer and winter sessions had achieved a membership of ninety-eight. Since then the society has gone on and prospered. No provincial geological society can show a better record of work done or a more valuable series of Transactions than the Glasgow society. This is partly due to the exceptionally favourable surroundings, and partly to the fact that the society was able to secure contributions from men like Lord Kelvin, Sir Archibald Geikie, Prof. Lapworth, and others, some of which have become geological classics.

This jubilee commemoration volume begins with a brief account of the geology of the Clyde district. Then follows a notice of some of the earlier workers in the geology of this area, amongst whom may be mentioned the Rev David Ure, author of the "History of Rutherglen and East Kilbride" (1793), containing the first descriptions and plates of western Scottish fossils; and John Craig, theologian, poet and geologist.

Chapter ii. contains a very full and interesting account of the origin and early history of the society, reprinted from a paper by Mr. T. M. Barr in the Transactions, vol. vii. The ensuing chapters contain reviews of the fifty years' work of the society in various branches of geological inquiry. Physical and dynamical geology is dealt with by Prof. J. W. Gregory, who gives a convenient summary of Lord Kelvin's early papers. The chapter on stratigraphical geology has been contributed by Mr. P. Macnair, that on mineralogy and petrology by Mr. Jos. Somerville, and that on glacial geology by Mr. John Smith. Special praise must be given to the chapter on palæontological geology by Mr. James Neilson. This is really a most valuable summary of western Scottish palæontology, especially of the Carboniferous rocks.

Later chapters are devoted to biographical notices of some of the society's more prominent members. There is here quite a galaxy of famous names, amongst which we note those of Lord Kelvin (president for twenty-one years), Sir A. Geikie, Prof. C. Lapworth, Dr. B. N. Peach, James Smith of Jordanhill, R. H. Traquair, and Thos. Davidson, all, with the exception of the last-named, past-presidents of the society.

The book is well got up and illustrated by a fine series of photographs of prominent members. The editing seems to have been excellently done, the only errors discoverable being the substitution of

"stations" for "sections" in the quoted title of a paper on p. 104, and the unaccountable omission of the names of T. G. Bonney, H. Woodward, and J. J. H. Teall from the list of honorary members at the end of the volume.

G. W. T.

OUR BOOK SHELF.

Unités Électriques. By Le Comte de Baillehache. Pp. x+202. (Paris: Dunod et Pinat, 1909.) Price 6 francs.

SOME time before the Cambridge school of physicists (which we have heard irreverently termed the "ion-catchers") had made even the man in the street more or less familiar with molecular dimensions, a celebrated mathematician had been making some calculations as to atomic quantities. He was much surprised at the results he obtained. On looking over his work he was unable to find any mistake, but, nevertheless, felt sure something was amiss. At last a humble physicist was able to point out to him that he had forgotten to multiply by "v," his result being, therefore, only some thirty thousand million times too small, which put things more or less right. In this case the enormity of the error made excited grave suspicion, but it is not easy to say how many times in ordinary practice grave errors may not have arisen, for example, in the magnetic testing of iron, from failure to remember that the C.G.S. unit of current is not an ampere.

Count Baillehache's book is a useful and up-to-date summary of practically all that is required to be known by the physicist, engineer and technologist about electrical units of all kinds, dealing with matters even as recent as the Congress of Electricians held in London during October last.

Though nominally confined to electric units, the book deals in a preliminary chapter with units in general, and commences with definitions and a clear account of the evolution of the various systems in use.

A chapter on the metric system follows a fairly complete history of the work done in the establishment of the metre and the kilogram, and the determination of the volume of the kilogram of water.

The bulk of the book consists of a description of both the C.G.S. system and the various systems of practical electrical units and standards, the equations to their dimensions, their relations to one another, with a number of conveniently arranged tables.

Some account is also given of the legislation of the various countries on electrical matters, and of the labours of the various electrical congresses.

Full historical details of the evolution of the ohm, volt, &c., and the construction of the practical standards of the same, such as mercury-tube resistances, the various forms of Clark and Weston cells, &c., are also found.

The book appears to have been carefully compiled, and we have not detected any serious errors. We cordially recommend it to practical physicists and electricians.

J. A. HARKER.

Traité de Mathématiques générales à l'usage des Chimistes, Physiciens, Ingénieurs, et des Elèves des Facultés des Science. By Prof. E. Fabry. Pp. x+440. (Paris: A. Hermann et Fils, 1909.) Price 9 francs.

IN 440 octavo pages of generously spaced printing, the author gives treatises on algebra, analytical geometry, the calculus, including differential equations, and even partial differential equations and mechanics. The book is very interesting, as it is intended for persons presumably not very mathematical, and there is hardly