

ultraviolet light in solar radiation, the subject of transparency of gases, liquids, solids and, in particular, glasses, is discussed in detail. Then follow important chapters on the reflection and production of ultraviolet radiation, in which the many sources now available are described and compared. After describing the detection and measurement of the rays, the author discusses their effect upon living matter and various photochemical actions. Although the reader would have been grateful in some places for a more critical discussion, he must feel that he is indebted to the writer for the large number of investigations described and for the many references.

*The Savile Club, 1868-1923.* Pp. vii + 206. (Privately printed for the Committee of the Club, 1923.)

THIS book will not only be welcomed by members of the Savile Club generally, but will also be a source of interest and pleasure to all such "strangers" as may come to read the anonymous author's "round unvarnished tale" of the birth and growth of the club, which has well striven to retain the original characters impressed upon it by the principles laid down by its founders. The founders' desire was, in brief, to establish a club consisting of a "mixture of men of different professions and opinions" by "a careful process of election." The eminently readable and racy story of the Savile's progress that occupies seventy pages of this history, in conjunction with the interesting chronological list of members and committees given in the rest of the work, supplies good evidence that these principles have not been forgotten.

A careful study of the whole of this work, as regards both matter and manner, and especially the apt quotation in the preface from the *Spectator* (No. 34, April 9, 1711), suggest to the present writer a probable clue to its author's identity. Such an author must necessarily be a Savilian of very long standing, and intimately acquainted with many fellow-members. He must, further, have had the habit of going to the club very frequently, and be endowed with mighty memory for details. Added to all this, he must be a genuine devotee to the club's principles and traditions. It is not possible to find in the whole list of members any one but Sir Herbert Stephen who possesses this infinite variety of qualifications. This hypothesis concerning the authorship withstands the application of a crucial test—the spirit and style of this admirably composed record.

Readers of NATURE may well take special interest in this book, which shows that the Savile Club has numbered among its younger members a large proportion of those who have become the most distinguished men of science in Great Britain and the world at large.

*Electro-Chemistry related to Engineering.* By W. R. Cooper. ("A Treatise of Electro-Chemistry," edited by Bertram Blount.) Pp. xiv + 136. (London, Bombay and Sydney: Constable and Co., Ltd., 1923.) 12s. 6d. net.

EVERY electrical engineer will admit that the science of electro-chemistry is of vital importance to his industry. All the copper he uses is refined exclusively by electro-deposition, and all the aluminium is produced electro-chemically. The electric refining of steel is now

widely used, and so also is the electric production of ferro-alloys. These alloys have enabled wonderful results to be obtained in the construction of aircraft. Supply engineers have to be very careful not to let electricity leak from their mains, as the resulting "vagabond" currents corrode water- and gas-pipes. It is therefore advisable that they should know to what extent their stray currents produce this corrosion, and whether they will corrode reinforced concrete or not. We were particularly interested in the chapter on electrical precipitation of dust, smoke, and fume, and its commercial applications. Unfortunately the costs vary greatly with circumstances, so no general figures can be given; but we think that if the laws regulating the emission of smoke into the atmosphere were made a little more stringent, manufacturers would soon find it more economical to prevent it electrically. The chapter on electro-culture gives excellently and very briefly the present state of the art. Mr. Cooper's knowledge is acquired at first hand. In the final chapter he discusses the relative importance of cheap power and cheap freights. In some countries the cheap power available is more than counterbalanced by the high cost of transport. To scientific workers, and more especially to electricians, this book will prove useful.

*In Witch-Bound Africa: an Account of the Primitive Kaonde Tribe and their Beliefs.* By F. H. Melland. Pp. 316 + 24 plates. (London: Seeley, Service and Co., Ltd., 1923.) 21s. net.

WHILE anthropologists frequently maintain the necessity for insight and sympathy in the administration of the affairs of backward races, it is not often that concrete examples of the peculiar psychology of primitive man are put to the layman so convincingly as some of the instances which Mr. Melland has singled out in this book. As an official of some twenty-two years' standing, he is in a position to speak with authority. From this point of view his book can be recommended heartily to every one interested in the government of our backward races.

On the scientific side, Mr. Melland's account of the Ba-Kaonde of Northern Rhodesia is equally important. The Ba-Kaonde consist of three elements, to which, however, the author gives a common name as a matter of convenience. He is of the opinion that they are offshoots of the Batuba. Some of their customs suggest an affinity with Central rather than South Africa. There is, for example, practically no "bride-price," but the husband stays with the bride's people for a period of from three to ten years, and his children belong to them. As the title of this book suggests, Mr. Melland is much impressed by the importance of witchcraft in the life of the people.

*The Cultivation of Sugar Cane in Java: an Elementary Treatise on the Agriculture of the Sugar Cane in Java, and more especially on its Cultivation on the Krian Sugar Estate.* By R. A. Quintus. Pp. xii + 164 + 38 plates. (London: Norman Rodger, 1923.) 12s. net.

THE position occupied by Java as a cane-sugar producing country, and the care bestowed on the cultivation of the crop, ensures a welcome to a book in English dealing with the agricultural methods employed on an important estate in eastern Java. This volume,