which on the coin is circumscribed by the name MEΓAPEΩN, i.e., of the Megarians, has been published in the United States as representing Euclid the mathematician. This unintentional historical misrepresentation appears in the publication, "A Portfolio of Portraits of Eminent Mathematicians" (1896), issued by the Open Court Publishing Company, in Chicago, a firm which in general has done as much as any other in America to advance a sound knowledge of the history of mathematics. The picture of Euclid of Megara is given as that of the mathematician, Euclid. In the memorandum accompanying the picture occurs the statement, "the name Megara is frequently coupled with his [name] on the early portraits as in this case."

The statement just quoted, in so far as it relates to the coin portrait in question, is in conflict with numismatic authority. A specimen of the coin referred to is in the British Museum and has been described by the great authority on coins, Barclay V. Head, who speaks of this coin as follows:²

MEΓΑΡΕΩΝ. Bearded head of the philosopher Eucleides of Megara, veiled and wearing ear-ring. . . . This remarkable type refers to the story that Eucleides attended the lectures of Socrates in the disguise of a woman, the Athenians having passed a decree that no citizens of Megara should be admitted within their walls. (Aulus Gellius, Noct. Att., VI., 10.)

In his catalogue of Greek coins Head³ quotes the Latin passage from Aulus Gellius, the Roman writer of the second century A.D., referred to above, who had studied at Athens. The passage tells the story of Euclid's going to Athens disguised in a "tunica longa

"Corolla Numismatica . . . in Honour of Barclay V. Head," Oxford University Press, 1906, pp. 368-386.

2"Historia Numorum, a Manual of Greek Numismatics," by Barclay V. Head, Oxford, 1911, p. 394.

3 "Catalogue of Greek Coins, Attica—Megaris—Aegina," by Barclay V. Head, D.C.L., Ph.D. Edited by Reginald Stuart Poole, LL.D., London, 1888, p. 121. See a drawing of the coin in Attica, etc., Plate XXI., 14.

muliebri" to attend the lectures of Socrates and of his returning to Megara the next day in the same disguise. In this book Head gives the date of the coin as "Cir. 146 B.C. or later"; in his *Historia*, quoted above, he gives, "Imperial Times?". While Head thus expresses uncertainty as to the exact age of the coin, he entertains no doubt as to the head-dress representing woman's apparel that was worn by Euclid of Megara when on his way to and from the lectures of Socrates.

It is therefore established with as great certainty that this coin does not give the bust of the mathematician Euclid as it is established that this mathematician was not Euclid of Megara.

FLORIAN CAJORI

UNIVERSITY OF CALIFORNIA

RAINBOW BY MOONLIGHT

To the Editor of Science: In connection with the case of the rainbow at night reported by Frank L. Griffin in Science of March 11, the following case may be of interest: At Burge, Nebraska, a rural post office about eighteen miles southwest of Valentine, on September 4, 1917, at about 9 P.M. a rainbow appeared. The moon had risen about an hour previously and a thunderstorm was coming up in the west, the rest of the sky being clear. A rainbow began to form and it continued to become brighter until a complete arch was formed. It was very distinct, but was nearly white and showed the prismatic colors very faintly if at all.

C. J. ELMORE

QUOTATIONS

BRITISH DYESTUFFS CORPORATION

The situation in which the directorate of the British Dyestuffs Corporation finds itself is a remarkable one. At the registration of this company in May, 1919, as a result of amalgamating British Dyes, Ltd., of Huddersfield, with Messrs. Levinstein, Ltd., of Blackley, the appointment of Sir Joseph Turner as commercial managing director, and of Dr. Herbert Levinstein as technical managing director, was designed to maintain the interests of both groups, and to benefit the united enterprise by the special contribution of knowledge and experience which each of these gentlemen was expected to make. At the meeting of shareholders in Manchester on Friday last it was announced that Sir Joseph Turner and Dr. Levinstein, while retaining their seats on the board, have been superseded as managing directors by Sir Henry Birchenough, the chairman of the corporation, Sir William Alexander, and Mr. Vernon Clay.

It is no reflection on the new managing directors to express the opinion that the position thus disclosed must arouse grave misgiving amongst all those who recognize the foundation of a self-supporting synthetic dyemaking industry as a matter of the greatest national importance. Disregarding the woeful absence of harmony which appears to be indicated, the aspect of this rearrangement which causes anxiety to chemists is the fact that, at a time when all the scientific knowledge and commercial energy available in this country should be correlated in a concerted effort to establish an industry which, more than any other, depends for success upon the combination of these factors, two of the most experienced practitioners should be removed from very intimate association therewith.

The proper and perfectly natural request for an investigation put forward by the shareholders met with a cold response from the board, and the declaration by the chairmen that a general meeting is not the occasion for an explanation of such peculiar circumstances is one with which many will sympathize; but the public is entitled to full information at the earliest convenient opportunity. Pending more precise knowledge of the facts, it would not be fair to the late managing directors, or to the board, to pass judgment on their action. If, however, as the published statements at present suggest, incompatibility of temperament is the cause, chemists will regard them as having failed in realizing their responsibility to science at a critical juncture; on the other hand, the board can scarcely escape the reproach of having allowed an impossible situation to continue far beyond the point at which a surgical operation had become an obvious necessity. Having regard to the immense scientific and national interests which are involved in the ultimate success of this enterprise, and to the large sum of public money which has been invested in the corporation, its future conduct demands very careful scrutiny.—Nature.

SCIENTIFIC BOOKS

Practical Plant Biochemistry. By Muriel Wheldale Onslow. Cambridge University Press, 1920. Royal 8vo, pp. viii + 178. Price 15s. net.

It is being recognized by students of the plant sciences that a thorough understanding of plant chemistry is essential to the solution of their problems. This knowledge has been usually obtained, on the one hand, from organic chemistry, and on the other, from plant physiology. It is the gap between these two sciences that this book is designed to fill. The author has made a real contribution to the study of plant chemistry. As in her former book on "The Anthocyanin Pigments of Plants," she has presented a very clear and comprehensive discussion; however, in the few pages of the present volume it is impossible to give more than a cursory discussion of the topic. The book is essentially a laboratory manual, which contains well-chosen experiments that have been tested in practical classes. Through these experiments the student learns to extract from the plant itself the chemical compounds of which it is composed and to understand something of their chemical properties. As an introduction to each chapter, there is presented the fundamental principles and relationships of the particular class of compounds studied in the experiments.

The volume is divided into the following chapters: I. Introduction. The synthesis of the various classes of compounds, and the chemical reactions by which they are brought