The Harvard University corporation has set aside $100,000 to pay Belgian professors who have been driven from their land by the war and may give courses at Harvard University next year.

James R. Magee, '59, has left $20,000 and a certain further residuary portion of his estate to Haverford College, to be added to the general endowment fund.

The Evans Museum and Dental Institute Building, which will be occupied by the School of Dentistry of the University of Pennsylvania, will be formally dedicated on February 22.

The Harvard Medical School will hereafter admit as regular students men who have completed two years' work in a college or scientific school of high rank, provided they present certificates (*a*) that they have stood in the upper third of their class, (*b*) that one year's course has been taken in physics, biology, general chemistry and organic chemistry, and (*c*) that they have a reading knowledge of German or French.

DISCUSSION AND CORRESPONDENCE

PROFESSOR DALY'S IGNEOUS ROCKS AND THEIR ORIGIN

To the Editor of Science: Permit me to say a few words in regard to the criticism[1] by Mr. J. P. Iddings of a book recently published by Mr. R. A. Daly and entitled "Igneous Rocks and Their Origin." The criticism is of the destructive, not to say the volcanic, type, and one may well imagine Mr. Iddings laying down his pen with the deeply felt conviction that a heretical and dangerous book has finally been disposed of.

I am afraid Mr. Iddings underestimates the strength of his opponent and he probably does not realize what strong influence the Daly theories, particularly the stoping theory, have on the younger generation of geologists. Mr. Iddings thinks that the author of this book suffers from an exuberant, if not a disordered, imagination. What Mr. Daly thinks about the imaginative qualities of his critic has not, so far, been made public. An impartial observer would probably say that the ideal petrologist would be produced could a "syntectic" assimilation be effected of the two.

It seems to me that Daly's book is one of the best ever written on the subject of igneous phenomena. The principal facts are assembled in the first part of the book, illustrated in abundance from the best sources and from occurrences all over the world. In the second part the theories and hypotheses are set forth, and illustrated in the same lavish manner from the whole world's literature. It is not necessary to agree with all of the author's views; I certainly disagree most heartily with some of them. The book is not a "college petrography" to be put into the hands of the beginner, but the advanced student can not fail to be stimulated by these suggestive and brilliant discussions. Just to point out one line of argument: The theory of gas action, cupolas and "blow-piping" is a most interesting and important subject, very largely neglected in most discourses on intrusions.

As far as his criticism of the "quantitative classification" is concerned, Mr. Daly does not stand quite alone. There are many of us who fail to see in this elaborate system anything but an admirable card classification of analyses.

I venture to suggest, in conclusion, that the unfavorable criticism in Science does not represent the impartial opinion of petrologists in general.

Waldemar Lindgren

Boston, Mass.

[1] Science, November 13, 1914.

SCIENTIFIC BOOKS

Photo-chemistry. By S. E. Sheppard, School of Agriculture, University of Cambridge. Longmans, Green and Company. 1914. Pp. ix + 461.

In this new volume of the series of "Textbooks of Physical Chemistry," edited by Sir William Ramsay, Dr. Sheppard, of Cambridge, presents us with a most painstaking piece of work, and one which for its size is unusually comprehensive. The author presents his sub-

ject-matter in eleven chapters, of which the titles are as follows: Historical—The Measurement of Light Quantities—The Energetics of Radiation—Economic and Energetic Relations of Actual Light Sources—The Absorption of Light—Statics and Kinetics of Photo-chemical Change—Dynamics of Photo-chemical Change—Special Photo-chemistry—Radiant Matter and Photo-chemical Change—The Genesis of Light in Chemical Change—Organic Photosynthesis.

The first four chapters do not carry us much beyond photo-physics, but give a very satisfactory résumé of those divisions of optical physics which are of primary importance in photo-chemistry. Beginning with Chapter V., the subject-matter becomes increasingly chemical in character, and the book ends with an excellent account of the more recent investigations into the character of the chlorophyll reactions.

To the reviewer the author's method of treatment seems most commendable. Such principles as may be considered thoroughly established are treated with scientific conciseness and brevity, not in general, however, without the presentation of sufficient numerical data for illustration. In dealing with matters which are still in the formative stage, a condition true of so much of photo-chemistry, the author does not dogmatize, but usually leaves the reader with quite the impression that the state of knowledge concerning the subject warrants. This makes the book valuable not only for the knowledge which it imparts, but also for its stimulus to critical thinking.

The book is made up quite directly from the original literature of the subject and is amply provided with citations and references. The author's personality shows itself not only in the thoroughness with which the material has been digested and assimilated, and later organized for the purpose of clear presentation, but also in not infrequent elucidating discussions and in occasional flashes of imaginative explanation. The reviewer's impression is that we have here the work of one thoroughly imbued with his subject, and at the same time entirely competent to handle it. The book should prove valuable not only to those desiring admittance to the charming mysteries of photo-chemistry, but should also be welcome as an additional weapon in the armory of the initiated.

S. W. YOUNG

STANFORD UNIVERSITY

The Hydrogenation of Oils; Catalyzers and Catalysis and the Generation of Hydrogen. By CARLTON ELLIS. New York, D. Van Nostrand Co., 1914. Price $4.00 net.

The book considers very fully the methods of hydrogenation, the various catalyzers, both the base and rare metals, and the mechanism of hydrogen addition. Besides this, the subjects of the analytical constants of the oils and their uses both for culinary purposes and soap making are thoroughly dealt with. About one third of the book is devoted to the methods for the generation of hydrogen, which is of prime importance: these include water gas, decomposition of hydrocarbons, steam on heated metals, acids on metals, the electrolysis of water, and the safety devices for handling the gas.

A feature of the book is the very complete citation of references and patents from the three principal languages.

The volume satisfactorily fills a decided want and may be unreservedly recommended to all interested.

A. H. GILL

A Text-book of Medical Entomology. By WALTER SCOTT PATTON, M.B. (Edin.), I.M.S., King Institute of Preventive Medicine, Madras, and FRANCIS WILLIAM CRAGG, M.D. (Edin.), I.M.S., Central Research Institute, Kasauli, Punjab. Christian Literature Society for India, London, Madras and Calcutta. 1913. Pp. xxxiv + 768. 84 pls. £1–1–0.

The protozoologist, parasitologist or physician who has occasion to deal with the arthropodan carriers of diseases produced by bacteria, Protozoa, or nematodes, has long been hampered in his investigation by reason of