

*Elements of Botany, including Organography, Vegetable Histology, Vegetable Physiology, and Vegetable Taxonomy, and a Glossary of Botanical Terms.* By EDSON S. BASTIN. Chicago, G. P. Engelhard & Co. 8°.

IF one can judge by the number of text-books on botany which have been published in this country during the last few years, either the number of botanical students must be very large, or the different text-books must treat the subject inadequately, for each new work has for its ostensible purpose the 'filling of a long-felt want.' What the want is, is not easy to say, unless it be a book which shall contain every thing in small compass, and that is a practical impossibility. The 'Elements of Botany,' by Professor Bastin, certainly gives a great deal in small compass, and must be considered one of the best treatises on the subject yet published in this country. It is evidently the work of a teacher, rather than a specialist, and gives the substance of what must usually be sought in several different text-books, and, while it cannot replace other well-known treatises, it forms a good introduction to them. The illustrations are numerous and generally good, and the style is clear and as attractive as could be expected considering the condensed form. Two-thirds of the book are devoted to organography and histology, — subjects which are best adapted to beginners. The chapters on physiology are very brief, but the subject is well treated. The same can hardly be said of the chapters on vegetable taxonomy, by which the author understands a description of the different classes of the vegetable kingdom. The illustrations of this part are not so good as those of the earlier parts, and the descriptions are not infrequently obscure, and also at times incorrect. The yeast-plant, for instance, cannot be said to belong to the *Schizomycetes*. It is to be regretted that authors of botanical text-books to be used by beginners almost invariably crowd a general account of the different classes into a few pages at the end. Treated in this way, the subject is always unintelligible, or next to unintelligible, and the space had better be used in amplifying other subjects and the student referred to larger and special works for an account of the classes.

*An Introduction to Greek Sculpture.* By L. E. UPCOTT. Oxford, Clarendon Pr. 12°.

No book of similar aim and scope can compare for a moment with this little book. It was originally written as a guide to the author's collection of casts and photographs from the antique at Marlborough College. It is now enlarged somewhat, and has in view a museum of casts and photographs adapted to the needs of a school or college. Mr. Upcott mentions the religious origin of Greek sculpture, notes its peculiar characteristics, and traces its development from the half-mythical Dædalus to the Græco-Roman period. The book is at once clear, compact, and comprehensive, and the best manual of Greek sculpture in the language.

*The Graphical Statics of Mechanism.* By GUSTAV HERRMANN. New York, Van Nostrand. 16°.

THIS is a translation into English of Professor Herrmann's work, which has already been published in German and French. The great advantage which the method presents is its simplicity. By the use over and over again of a few easily mastered principles, the most complicated problem may be solved. No knowledge of higher mathematics is required in its mastery, and no handling of lengthy and involved algebraic formulas is necessary in its use. The object of the treatise is principally to facilitate study for the students of technical schools, upon whose time and industry increasing demands are made from day to day.

#### NOTES AND NEWS.

THE earthquake of Central Asia, the principal shock of which occurred on June 19, has a remarkable feature in common with the Charleston earthquake. In most cases chains of mountains prevent the spreading of the shocks, but in these cases high ranges were crossed. The Charleston earthquake traversed the Alleghanies, and that of Vernoye — the situation of which may be seen on our map of Central Asia (Aug. 5) — was felt on the Issik-Kul, though the chains of the Ala-tau lie between the centre of the disturbance

and that lake. The epicentre was in the district of Aksai, about fifteen miles west of Vernoye. About 800 persons are said to have been killed by falling houses and rocks rolling down from the mountains. Numerous fissures were formed on the northern slope of the Ala-tau, particularly near Vernoye. East of this place the shocks were less destructive. Part of the shore of Issik-Kul moved three feet downward. An expedition is at present at work to investigate the geological structure of the disturbed area.

— We learn that the Signal Service has ordered the abandonment of the following stations on the Pacific coast: Monterey, San Luis Obispo, Bakersfield, Modesto, Indio, San Bernardino, Carson, Yreka, Santa Rosa, and Mendocino City. As soon as the official intention was announced, the publisher of the *San Francisco Chronicle* came forward and offered to provide observers, pay for telegrams, warnings, and so forth, provided that the government would allow the instruments to remain. This offer has been accepted.

— It will be of interest to learn, says *The Publishers' Weekly*, that the adherents of the international language Volapük have just held a congress at Munich, presided over by Professor Kirchhoff of the University of Halle. It was decided to use the home spelling for proper names, to drop the ceremonial form 'you' (employing 'thou' in the singular), and to make some few simplifications in spelling and grammar. The most important action was the establishment of a Volapük academy, to whom all future grammatical and lexicographical difficulties shall be submitted. Eighteen academicians were elected, representing Germany, Hungary, Austria, Holland, Russia, Sweden, France, Spain, Portugal, Italy, Asia Minor, England, and North America. The American representative is Mr. Charles E. Sprague of New York.

#### LETTERS TO THE EDITOR.

\*.\* The attention of scientific men is called to the advantages of the correspondence columns of SCIENCE for placing promptly on record brief preliminary notices of their investigations. Twenty copies of the number containing his communication will be furnished free to any correspondent on request.

The editor will be glad to publish any queries consonant with the character of the journal.

Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

#### Is there a Diamond-Field in Kentucky?

THE great similarity of the peridotite of Elliott County, Ky., to that of the South African diamond-fields has attracted considerable attention, and hundreds of prospectors, moved by 'interesting possibilities,' have visited the region in search of gems and precious metals.

In May, 1885, when the peridotite of Kentucky was studied in the field, the character of the diamond-bearing rock in South Africa was not yet fully understood, and consequently no search was made at the time for diamonds. Recent developments, however, rendered it desirable that they should be intelligently sought for; and upon the invitation of Mr. J. R. Procter, the State geologist of Kentucky, we were sent by Maj. J. W. Powell, the director of the United States Geological Survey, to make the investigation.

The locality is easily reached by way of the East Kentucky Railroad, which ends in Carter County at Willard, where conveyance may be obtained of the farmers to traverse the remaining ten miles to the best exposures of the peridotite along Isom's Creek, in Elliott County.

The peridotite alters and disintegrates readily; but, from the fact that the declivity of the surface is considerable, the transportation of material almost keeps pace with disintegration, and there is no great accumulation of residuary deposits upon the narrow divides and hillsides. The specific gravity and durability of the gems found in connection with peridotite are generally greater than those of serpentine and other products of its alteration. On this account the gems accumulate upon the surface and in favorable positions along adjacent lines of drainage. Our plan was to search by sifting and carefully panning the stream-beds receiving the drainage directly from the surface of the peridotite, and to enlist the services of the people in the neighborhood to scrutinize the steep slopes where gems weathered out of the peridotite might be exposed. Particular attention was directed also to the examination of the