

This apparently furnishes, at least, a straw pointing in the direction I have been moving in my study of the Maya hieroglyphs.

Washington, D.C., July 15.

CYRUS THOMAS.

Historical Statements in Century Dictionary Contradicted by Other Authorities.

Napier's rods (or bones), a contrivance commonly attributed to John Napier (1550-1617), but in fact described in the Arithmetic of Oronce Finée (1532).—*Century Dictionary* under *rod*.

Die erste Beschreibung gab Nefer in seiner Rabbologia (Edinburg, 1617).—*Vorlesungen über Geschichte der Mathematik*, von Moritz Cantor, zweiter Band, Seite 660.

The earliest known writers on the subject (magic squares) were Arabians, among whom these squares were used as amulets.—*Century Dictionary*, under *magic*.

The earliest known writer on the subject was Emanuel Moscopulus, a Greek, who lived in the fourth or fifth century, and whose manuscript is preserved in the National Library at Paris.—*Encyclopedie Britannica*, under *magic squares*.

These seem to me to be contradictions. I should be glad to see the truth in regard to these historical facts plainly set forth by a reader of *Science*.

GEO. A. MILLER.

Eureka College, Eureka, Ill., July 24.

The Cambodian Khmers.

OWING to some irregularity in the postal delivery I have only just received *Science* for June 9, else I should have sooner asked leave to put in a claim of priority in connection with Dr. Maurel's new views regarding the "Aryan" origin of the Khmers, referred to by Dr. Brinton in that issue. Personally I avoid the expression "Aryan" or Indo-European stock" as confusing and applicable far more to linguistic than to ethnical groups. But if "Caucasian," used in Blumenbach's sense, be substituted for

"Aryan" Dr. Brinton will find, by consulting the Transactions of the British Association for 1879, that fourteen years ago I conclusively showed that the Khmers should be grouped not with the surrounding Mongolic, but with the Caucasian division of mankind. In the "Monograph on the Relations of the Indo-Chinese and Inter-Oceanic Races and Languages," read before the association, and again before the Anthropological Institute and printed in the journal of that society for February, 1880, and issued separately by Trübner at same date, I argued *generally* that "both of the great Asiatic types conventionally known as Caucasian and Mongolian, have from prehistoric times occupied the Indo-Chinese peninsula," and *particularly* that here the Caucasian stock is represented by the widespread Khmer group, that is to say, the Cambodians proper, the Kuys or Khmerdom ("original Khmers"), as the Cambodians call them, the Stiengs, Charays, Chams and many others, some still in the tribal state, some long civilized or semi-civilized. It is the civilized that mainly engage Dr. Maurel's attention, and that he rightly regards as Aryans (read Caucasians), but wrongly supposes to have migrated in comparatively recent times from India to Indo-China, "bringing with them the Aryan culture of that country as proved by the stately ruins of Ang-Kok (read Ongkor-Vaht)." There was no such migration "probably about the third or fourth century of the Christian era," for the Khmers are not recent arrivals, but the true aborigines, as shown by the presence of the Khmerdom and the kindred wild tribes, and also by their untuned polysyllabic speech, radically distinct both from the Indo-Chinese toned monosyllabic group and from the Indic (Sanskritic) branch of the Aryan, but closely allied to the untuned polysyllabic Malayo-Polynesian linguistic family.

This point, which I think I have established to the satisfaction of most ethnologists and philologists (Professor Sayce amongst others), is of far-reaching consequence. It affords the solution of the extremely difficult problem connected with the presence of Logan's "Indonesians," my Caucasians, side by side or intermin-

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gled with the true Mongoloid Malays throughout the Oceanic domain (Indian and Pacific Oceans). But my object here is merely to establish my priority claim for the American readers of *Science*, who are referred to the above quoted monograph for the detailed treatment of these interesting questions.

A. H. KEANE.

79 Broadhurst Gardens, South Hampstead, N. W., July 21.

Sound and Color.

WITHOUT in the least doubting the accuracy of Dr. Wallian's curious observations respecting the appearance of color about the heads of public speakers, I would just suggest the possibility of another explanation.

I have myself frequently observed, when listening to various preachers, a patch of rich blue color near to the head of the speaker. I have always attributed this, however, to the well-known effect upon the retina of fatigue from the continued impression of one color giving rise to a phantasm of the complementary color. The face of a speaker is some tint of flesh color. The eye of the listener is fixed upon the face, and in a short time the complementary phantasm makes its appearance, always some tint of blue or purple, according to the complexion of the speaker.

This will not, of course, explain all the phenomena mentioned by Professor Underwood and Dr. Wallian, but it is a factor which should not be forgotten in discussing the subject.

F. T. MOTT.

Leicester, England.

BOOK-REVIEWS.

A Biographical Index of British and Irish Botanists. By JAMES BRITTEN and G. S. BOULGER. London, West, Newman & Co., 1893. 203 p.

MESSRS. Britten and Boulger have republished in book form their "Index of British and Irish Botanists." The matter originally appeared in the *Journal of Botany* from 1888 until 1891, but in 203 pages of the reprint a large amount of additional material is

given. This is shown by the fact that 1,825 names are given in the volume, against 1,619 given in the *Journal of Botany*. In a succinct form and by means of a series of readily understood abbreviations there are given the dates of birth and of death, place of birth and death, place of burial, indication of social position or occupation, university degrees or titles or offices held, and dates of election to the Linnæan and Royal societies. Mention is also made of the whereabouts of any correspondence or MSS. and the existence of any herbarium or plants collected. Various biographical dictionaries, where further information may be obtained, are also referred to. Any portrait, original or engraved, and any genus, or, failing this, any species, dedicated to the person, is mentioned. From this it will be seen that a large amount of information is gathered within a small compass, and the volume will be of great assistance in looking up facts relative to any one of the 1,825 names included within its pages.

JOSEPH F. JAMES.

Washington, D. C., July 22.

AMONG THE PUBLISHERS.

HANN & ADAIR, Columbus, O., announce "A History of the German Language from the Earliest Times to the Present Day," by Chas. W. Super, president of the Ohio University at Athens. The purpose of the author has been to write a book that may be read with interest and profit by persons whose knowledge of German does not extend beyond the rudiments. It has been his aim to make duly prominent the common origin of the English and German languages and to use many facts of the former to elucidate those of the latter, so far as it can be done within the space at command. The book also discusses incidentally some phenomena common to all civilized tongues. By the same author is "Weil's Order of Words in the Ancient Languages Compared with that of the Modern Languages," published by Ginn & Co., Boston, Mass.

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A complete set of Bulletins of U. S. Geological Survey, various reports and bulletins of surveys of Missouri, Arkansas, Minnesota, Alabama, Illinois, New York, Pennsylvania, Indiana, Ohio and Texas; iron ores of Minnesota; Wailes' Agriculture and Geology of Mississippi (rare). To exchange for periodicals and books on Entomology or for Lepidoptera. Rev. John Davis, the Deanery, Little Rock, Ark.

For sale or exchange.—A complete set of the report of the last Geological Survey of Wisconsin, T. C. Chamberlin, geologist. It consists of four large volumes, finely illustrated, and upwards of forty large maps and charts. Will sell for cash or exchange for a microscope. Address Geo. Beck, Platteville, Wis.

For sale or exchange for copper coins or rare postage stamps. Tryon's American Marine Conchology, containing hand colored figures of all the shells of the Atlantic coast of the United States. Presentation copy, autograph, etc. One vol., half morocco, 8vo, usual price, \$25, postpaid, \$15. Botany of the Fortieth Parallel of the Hundredth Meridian of the Pacific R. R. Survey. Other Botanical works and works on Ethnology. F. A. Hassler, M.D., Santa Ana, Cal.

I have a fire-proof safe, weight 1,150 pounds, which I will sell cheap or exchange for a gasoline engine or some other things that may happen to suit. The safe is nearly new, used a short time only. Make offers. A. Lagerstrom, Cannon Falls, Minn., Box 857.

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Wants.

WANTED—Panorpidæ, Myrmeleoninae, and literature on the same. Chas. C. Adams, Bloomington, Ill.

WANTED.—Assistant in Nautical Almanac office, Navy Department. The Civil Service Commission will hold an examination on August 15 to fill a vacancy in the position of assistant (computer) in the Nautical Almanac office. The subjects will be letter-writing, penmanship, trigonometry, rudiments of analytical geometry and calculus, logarithms, theory and practice of computations, and astronomy. Each applicant must provide himself with a five-place logarithmic table. The examination will be held in Washington, and if applications are filed in season, arrangements may be made for examinations in the large cities. Blanks will be furnished upon application to the Commission at Washington.

DRAFTSMEN WANTED.—The Civil Service Commission will hold examinations on August 15 to fill two vacancies in the War Department; one in the position of architectural draftsman, salary \$1,400, the other in the position of assistant draftsman, Quartermaster General's office, salary \$1,200. The subjects of the architectural draftsman examination are letter-writing, designing specifications and mensuration, and knowledge of materials; of the assistant draftsman examination they are letter-writing, tracing, topographic drawing and projections. The examination will be held in Washington, and if applications are filed in season, arrangements may be made for examinations in the large cities. Blanks will be furnished upon application to the Commission at Washington.

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