

constellation *Quadrans Muralis*, about 20° north of Corona, and between Boötes and Draco. The shower seems to have been in pretty strong evidence at its recent return, for Prof. Herschel observed some fine long-pathed meteors from it during the hour preceding midnight on January 1, and Mr. Milligin, of Belfast, writes me that, on the morning of January 2, he recorded twelve of its meteors indicating a radiant in the usual position at $230^\circ + 52^\circ$. Though often escaping notice, the January meteor stream sometimes furnishes a really active display, and an observer may count thirty or forty shooting stars in an hour. They are brighter than the average of such objects, and the radiant being low during the greater part of the night, they have very extended flight, which adds to their conspicuous appearance.

Bristol, January 8.

W. F. DENNING.

The Svastika.

IN your report of the Presidential Address, Section H, Anthropology, at the British Association, I observe on p. 529 that, "It is in the same Anatolo-Danubian area—as M. Reinach has well pointed out—that we find the original centre of diffusion of the Svastika motive in the old world."

I trust that you will permit me to point out that this type of ornament is not uncommon among our Pre-Aryan savage races, and I enclose a rubbing of one, off a large flat engraved hair-pin



worn by the women and grown-girls of the extreme eastern Naga group, near Margharita, Upper Asam.

These bone hair-pins are peculiar, and the patterns do not vary. I describe them on p. 6 of my paper in the *Journal of the Asiatic Society of Bengal* (vol. lxx. part iii. No. 1, 1896), copy of which I send.

A complete costume of one of these Naga women has been sent to Dr. E. B. Tylor, Oxford Museum, and I have no doubt a *Svastika* will be found on one of the hair-pins.

As the Aryan influence has not yet reached these hill savages, many tribes of whom are still head-hunters, I presume the dictum above quoted as to the home of the *Svastika* will be modified.

In your issue of April 30 last, on p. 605, I drew attention to the fact that "Megalithic folk-lore" still survives here among our Junglis. No notice has, I see, been taken of the matter: surely it is noteworthy?

S. E. PEAL.

Sibsagar, Asam, December 5, 1896.

A Critic Criticised.

THERE is a tendency among critics to condemn a book for not comprising what it was not intended to contain. Such critics have a preconceived notion of what a writer should have included in his treatise; they glance through the pages in a superficial manner for what they think should be there, and not finding such topics expressed to their mind immediately condemn the treatise.

This pernicious habit of critics is well illustrated by recent criticisms (*NATURE*, p. 545, October 8, 1896; *The Electrician*, p. 637, September 11, 1896), of Prof. Bedell's book, "The Principles of the Transformer," by Frederick Bedell, 1896, on the theory of the transformer. A writer in *NATURE* sees nothing good in the treatise because it does not enter fully upon the practical details of transformers with iron cores. To do this, Prof. Bedell would have been compelled to greatly increase the size and scope of his book. It was plainly his object to outline, so to speak, the scaffolding of the edifice, and to give in a clear manner the fundamental equations upon which the discussions of transformers rest, and to illustrate the use of graphical methods in such discussions.

Before the appearance of Prof. Bedell's treatise, the student was compelled to rely upon books which were illogical collections of articles originally published in electrical journals, and

hastily thrown together in a book form. A just critic should recognise the endeavour of Prof. Bedell to bring order out of chaos, in presenting the fundamental equations used in discussions of alternating currents in such a clear and instructive manner.

JOHN TROWBRIDGE.

Harvard University, Cambridge, Mass.

IN the mind of a reader acquainted with the literature of the subject, and having read also the book, to which reference is made in Prof. Trowbridge's letter, the somewhat exaggerated statements in his note can only excite surprise. An author must, to a large extent, be judged by the claims he makes for his work. If the book in question had been entitled "A Mathematical Treatise on Harmonic Currents," it would have been placed on unassailable ground. The writer of it, however, selected a title which certainly claims for it a practical character. His treatment of the subject is largely confined to a discussion of the properties of transformers and condensers in which the real magnetic and dielectric qualities are ignored. The result of such a mode of dealing with the subject is to present a series of interesting mathematical problems, but they have the same relation to the real apparatus that problems concerning weightless pulleys and levers have to the operations of the block, tackle, and crowbars of actual life.

THE REVIEWER.

The Union of Nerve Cells.

TO a note by Mr. Alfred Sanders, in a recent number of *NATURE* (p. 101), criticising the assertion by Ramon y Cajal, that the nerve cells are independent units, and never form anastomoses between one another, I would like to remark that Cajal is not alone in forming such a conclusion. The general consensus of opinion of many other practical neuro-histologists favours the same conclusion. There is no doubt that many cases, such as that which Mr. Sanders mentions finding in *Tropidonotus natrix*, occur; I have found more or less similar ones in the brain of the honey-bee. But when one considers that two fibres in contact would, if thoroughly impregnated, present the appearance of continuity, it is more or less evident that one cannot be guided in forming a decision by such cases as those cited, and that one must depend upon the immensely larger number of cases in which the terminations of fibres are found near, but not in contact with, one another. This is to be said of all preparations by either the various Golgi, or by the methylen-blue, methods, and is something to which I have elsewhere called attention ("The Brain of the Bee," p. 161-2, *Journal of Comparative Neurology*, vol. vi.).

F. C. KENYON.

Philadelphia Academy of Natural Science.

I MAY remark, in reference to Mr. Kenyon's letter, that my object in sending the communication on p. 101 was not to criticise Ramon y Cajal's conclusion that no cells of the nervous system ever anastomose, which I have no doubt is, as a rule, correct, but simply to place on record a rare exception, the only one that I have found in several hundred sections, prepared either by the chrom-osmium silver or mercurial methods, of the nervous system of the lower vertebrata. There is a slight misunderstanding on Mr. Kenyon's part, due, probably, to the way I put it. The two cells to which I referred were not joined by the extremity of each dendrite, but by the dendrite of one cell joining, after a short course, the body of the other cell, and even projecting into it. I found a case somewhat similar to this some years ago in the *Ceratodus*, where two cells of the spinal cord were joined by a broad protoplasmic band; but this specimen was treated in the old way, by being stained with some aniline dye.

A. SANDERS.

Two Corrections.

THERE is a slip of the pen, or of memory, in the description of the shrine of Boro Budur, in Java, as "rock-hewn," in your issue of yesterday (p. 228). The shrine is indeed a natural hill, but cased in cut masonry, which bears all the sculptures. I happen to possess the great Dutch work on it, with plans, so can speak with some confidence. Another slight "erratum" in the same number (p. 234), is the description of the Bombay Observatory Staff as native "with the exception of Mr. Moos." Mr. Moos must, by his name, be a Parsi of Western India. There are many Parsis of that surname, and, particularly, several scholars and scientific men.

W. F. SINCLAIR.

January 8.