

OUR BOOK SHELF

La Théorie Huguodécimale; ou, La Base scientifique et définitive de l'Arithmologistique universelle. Par le Cte. Léopold Hugo. (Paris, 1877.)

M. HUGO continues to pour forth his pamphlets with their polyglot inscriptions. On this we have "Urbi et orbi. Hic tandem triumphaliter fulget REGULARITAS!" "La pan-imaginariété Hugomathique: CONTINUITAS! CONTINUITAS! TRICONTINUITAS!" We have, in a former notice, glanced at the "Géométrie Hugomoidale." The object of the present pamphlet is "à vulgariser et à répandre dans les diverses régions civilisées de l'ancien et du nouveau monde, Tou-Kieou, Tchong-Kouo, Fou-Song, &c., &c., cette haute doctrine philosophique, qui, dans sa concision, mérite assurément une place aux premiers rangs de la Philosophie Scientifique. Mais, dans mon isolement de simple philosophe, force me sera d'employer les combinaisons les plus étranges, et de frapper l'attention du lecteur par la singularité même de mon exposition."

One or two extracts must suffice to show how our author proceeds:—

"Évocation Chino-Tibétaine. Nous, suprême Grand Lama, voulons reproduire pour tous l'opération magique hugodécimale.

"Salut! Salut!"

"En notre Divan sacré de Hlassa-Potala, parfumé de nuages d'encens, nous étendons la main gauche en désignant et déterminant un point dans l'espace ambiant.

"Salut! Salut!"

"De notre main droite étendons le sceptre, pan-scientifique et sacré, sur ce point de l'espace. Salut! salut!"

"Apparaît une figure enveloppant le point considéré: figure offrant quatre faces pareilles.

"O Saints Lamas, placez pieusement sur notre tapis drécieux, le premier solide que l'espace régulier vient d'enfanter.

"SSÉ—MIÉ (with figure of tetrahedron).

"Salut! Salut!"

And so on through the ten solids, of which we gave an account in our earlier notice.

The third chapter is taken up with the "Géométrie Pan-imaginaire" and the "Arithmétique Pan-imaginaire," communications made to the Société Mathématique de France, and which we have previously described.

Sufficient notice has been taken of this *brochure* of thirty-two pages, with many figures.

To some of our readers our remarks will serve as a beacon; those who like to secure oddities may perhaps be induced to add this to their stock. Our principal reason for yet noticing another effusion of our author is that we have at last got a notice of him from one of his own countrymen, who calls him "Sans contredit, dans le domaine des sciences, l'un des plus actifs novateurs de l'époque" (M. Gérono, *Nouvelles Annales de Mathématiques*, Juin, 1877, pp. 278-280). Like ourselves, M. Gérono confines himself to *extracts*. In his *avertissement* M. Hugo bursts forth with "Écrasons les pan-routiniers! qu'ils tremblent, blottis dans leur petite science, devant l'ouragan hugomathique!" Upon this the French reviewer well remarks:—"Mon avis est qu'il ne faut écraser personne, et que les philosophes réformateurs doivent se garder de prendre l'exaltation des idées pour le sublime des idées. Ce n'est pas sans danger qu'on se lance dans la voie des réformes avec un enthousiasme qui, dans sa marche ascendante, pourrait s'élever jusqu'au délire." The writings of such a visionary perhaps hardly merit a notice; we are disposed henceforth to let him go his own way, trusting that time will clear up many, if not all, of his crotchets.

Mechanik der Bewegungen der Insektenfressenden Pflanzen. Von A. Batalin.

WE have here a record, reprinted from the pages of

Flora, of a very careful series of experiments on the cause of the "spontaneous" movements of the glands of *Drosera* and other similar organs when irritated say by contact with a fly. Comparing the well-known explanation given by De Vries and others of the movements of tendrils—that contact causes an acceleration of growth in the organ, not on the side touched, but the opposite side, and consequently a concave curving round the touching object—Batalin offers the same explanation of the curvature of the tentacles of *Drosera* when irritated by a fly, viz., an acceleration of growth on the side opposite to the one touched, and in consequence a concave curvature. While admitting the care with which Batalin has performed his experiments, we fail to see how his explanation accounts for some of the well-known phenomena of these singular plants; as, for instance, the fact vouched for by several observers, that glands which are not themselves irritated exhibit the same concave curvature as those that are, and especially those so circumstantially described by Darwin as to the extreme sensitiveness of the tentacles of *Drosera* to the most dilute ammoniacal solutions, while they are quite insensitive to pure water. The "spontaneous" curvature Batalin believes to be a function of growth, and to be displayed in proportion to the faculty of growth possessed by the organ.

LETTERS TO THE EDITOR

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The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to ensure the appearance even of communications containing interesting and novel facts.]

Relations between Sun and Earth

PERMIT me to correct a slight misapprehension in Mr. Archibald's very interesting article on the Indian rainfall in *NATURE*, vol. xvi. p. 340. Mr. Archibald speaks as if my discovery regarding the coincidence of the increase and decrease of the Madras rainfall with the cycle of sun-spots applied to "the whole of Southern India." Now, on the contrary, I guarded against such a generalisation by a sentence expressly inserted for that purpose. "I merely record," I said at p. 9 of my paper, "the statistical evidence collected at a point on the globe's surface, at which, from its tropical situation and physical conditions, such a factor would exercise an influence in a well-marked manner." I insisted on this, as the local influences at work on the rainfall suffice in several parts of Southern India, to disguise the operation of any general law. Mr. Archibald may, however, have been led into this misapprehension from an ambiguous expression in the first sheets of my paper, which were hastily struck off as I was leaving India, with a view to placing the Government in possession of the facts before my departure. In these sheets I find the words "Southern India" used once or twice as a periphrasis to avoid the too frequent repetition of the word Madras. This ambiguity was removed from the paper as finally printed. I need hardly add that the words "the whole of Southern India" nowhere occurred. I hope shortly to show in a more carefully elaborated work, the limitations under which the results arrived at in my former paper can be safely generalised. Meanwhile Mr. Archibald's interesting communications both in *NATURE*, and in the Calcutta *Englishman* are worthy of careful study.

WM. HUNTER

LANARKSHIRE, August 27

The Telephone

In the present agitation concerning speaking or telephonic telegraphs, the following extract from M. Le Comte du Moncel's "Exposé des Applications de l'Electricité," edition of the year 1857, vol. iii. p. 110, may be interesting as pointing out how nearly the idea has been forestalled.

"The Electric Transmission of Speech."

"I did not wish to bring forward in the chapter of the electric telegraph a fantastic conception of a certain M. Ch. B——, who