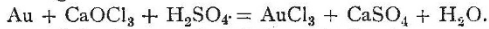


The Chlorination Process. By E. B. Wilson, E.M. Pp. iv + 125. (New York: John Wiley and Sons. London: Chapman and Hall, Ltd., 1897.)

THIS little volume bears a strong family resemblance to the book on "Cyanide Processes," by the same author, which has already been reviewed in NATURE. An engineer who has not studied chemistry so much as other subjects naturally encounters difficulties in describing a "wet" or so-called chemical process. For example, on p. 61, the equation representing the formation of gold chloride in cases where bleaching powder is used is given as follows:



It is stated further on that "the chlorination process is based upon this reaction." If such opinions are not counted, there is not much that is new in the volume.

LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of NATURE. No notice is taken of anonymous communications.]

African Language.

IN an exceedingly interesting article in your issue of the 16th, on "Anthropology versus Etymology," I am so much struck by the clear statement of the old school mythologist dogma, that "the old name of a deity which had lost its meaning might remind a later generation of the name of some beast; hence might arise those stories of gods taking the forms of beasts," &c. That this is really the case among certain West African tribes I am quite certain, and I believe that, as far as West Africa goes, the confusion caused in white minds by the language has given rise to a good deal that has been said regarding the West African natives believing themselves descendants of animals. It is, I need hardly say, no uncommon thing to find one and the same word used for two or more distinct things. When that word is written down by a white man, who may not notice the accompanying gesture, that marks in which relation it is employed, error is liable to creep in, and you may be calling "slowness in walking" "the new leaves on trees," or *vice versa*, or "a hundred bundles of bikei" "the butt-end of a log," or, "a finger-snap" "your maternal aunt" among the Balanh. This also shows as an element of the danger of judging from words alone in the case of the name used by all the Fjort tribe, who are under the Nkissi school of fetish, for their great over-lord of gods, *Nzambi Mpungu*. In the Loango and Kacongo districts *Mpungu* means a great ape, and the word is used there also as the name for this great god, the creating god; hence it would be easy, and I hope excusable, for I did it at first myself, to think the great god and the ape had some connection. Nevertheless, they have not *Nzambi Mpungu* as a name, for the great deity was imported into the Kacongo and Loango from a region on the south bank of the Congo, with the rest of the Nkissi cult, prior to the discovery of these regions by Diego Caô; and therefore, when the word is used in a religious sense, it bears the religious meaning which it brought from its original home, namely, *something that is above, or that covers over*. Mr. R. E. Dennett tells me that *Mpungu* is used in this sense to this day in the Nlanoi dialects.

The truth is, we are now urgently in need of a Prof. Max Müller for African languages. When attempting to grasp the underlying idea of witch-doctors' methods at Okiyon (among true negroes, I found an alarming state of affairs connected with the so-called word *woka*. The only thing I can liken *woka* to is a nest of spiders, which as soon as you touch it with a stick ceases to be a manageable affair; in *woka* there are representations of at least three sets of opinions bearing on the inter-relationships of matter and spirit. I subsequently found ample reason to believe that this was the case with all secret society words; namely, that they were words the full meaning of which were only known to the initiated. The ordinary free man or woman passing through the ordinary course of secret society instruction would only learn the signification of a simple set of them. The full meaning of the strong words are only known to the few men at the head of the society. Having grasped this state of affairs I decided to stick to fishing and the

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land law, hoping that this mystery was confined to the *strong mouth*; but a few months ago, I having requested Mr. Dennett, of Loango, to send up some of the interesting stories I knew were prevalent among the Fjort tribe, among whom he has lived for seventeen years continuously, he sent me what he calls "the key to the Fjort alphabet," which shows me this strange figurative unworked-at thing lays behind the whole of that language. I have no hesitation in saying Mr. Dennett's MS. is a most appalling work, and it produces great irritation in most patient anthropologists promptly; and what we now require, as aforesaid, is that Max Müller who will give the student of the African great assistance, and then we will hope some great philosopher will come and enable us to have anthropology *cum* etymology and any other ology that will help us to know the whole truth.

M. H. KINGSLEY.
100 Addison Road, Kensington, W., September 19.

On Augury from Combat of Shell-fish.

IN your issue of May 13 (p. 30), Mr. Kumagusu Minakata quotes several examples of augury from the combat of shell-fish. In Spencer St. John's "Life in the Forests of the Far East," vol. i. p. 77, amongst various ordeals related by him as being practised by the Sea-Dyaks of Sarawak, he gives the following:—"Another is with two land shells, which are put on a plate and lime-juice squeezed upon them, and the one that moved first shows the guilt or innocence of the owner, according as they have settled previously whether motion or rest is to prove the case."

CHAS. A. SILBERRAD.
Etawah, N.W.P., India, August 21.

THE MEUDON ASTROPHYSICAL OBSERVATORY.¹

THE foundation of this national observatory may be said to date from the time of the return of the French expedition which was sent to Japan to observe the transit of Venus in the year 1874. Since that period the observatory has been content to publish many of the important results of work completed in various journals, chiefly in the *Comptes rendus*, but it is only quite recently that the first of a series of "Annals" has appeared. It is this volume which we propose now to pass under review; but we may preface our remarks by reminding the reader that many of the sections inserted are not published here for the first time, especially those relating to the photography of solar surface details.

M. Janssen opens with a most interesting historical introduction, which sums up the steps which led to the present efficient state of this national observatory, the line of work which has been actively pursued since its foundation, and the instrumental equipment which it now possesses. Neither does he forget to refer to the important rôle played by M. Cezanne, an eminent engineer and the principal originator of the French Alpine Club, in proposing and strongly advocating, before a meeting of the National Assembly, the necessity of establishing, near Paris, an observatory for the pursuit of physical astronomy. The suggestion was in due course submitted to the Academy of Sciences, and the committee appointed to inquire into it thoroughly endorsed the advisability of the scheme. It was pointed out that such an institution was not only useful, but necessary and urgent; that the part taken by France in these new studies, their importance, and the novelty of the methods on which they were founded, made them a new and distinct branch of astronomy, and called for a special establishment, where they could be freely cultivated. Strengthened by the discovery of spectrum analysis and photography, physical astronomy became a branch of astronomy of sufficient importance to be pursued with success and developed by itself.

The necessity for the establishment of the institution being thus strongly stated, it was not long before an observatory was provisionally installed at the Boulevard

¹ "Annales de l'Observatoire d'Astronomie Physique de Paris," par J. Janssen. Tome I. (Paris: Gauthier-Villars et Fils, 1896.)