

and minima of the wind curves in

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|-----------------------|----------------|----------------|----------------|----------------|------------------|
| Unsmoothed } curve | 1846 (10) | 1859 (27) | 1872 (27) | 1882 (18) | 1894 (?) (30) |
| Smoothed } curve | 1846 (27·8) | 1860 (30·0) | 1873 (31·8) | 1883 (29·4) | |

The high value for our last cold season strikes one as a little anomalous, causing an unusual break in the smoothed curve, if we suppose (as we perhaps may) that this curve has not yet reached its lowest point before rising to the next maximum (say) about 1901.

It would appear, then, that in the period considered, the northerly type of weather, in which we are generally on the eastern border of an anticyclone, has been specially prevalent about the time of minimum sunspots, giving way to some other type or types in the interval.

A careful study of the behaviour (movements of translation, of contraction and expansion, &c.) of those high and low pressure systems which determine the direction of wind, and furnish our weather generally, seems likely, in the future, to throw some useful light on the nature of solar influence on our atmosphere. In this connection, I may refer to the work of the American meteorologist, Prof. Bigelow, who finds (*Am. Journal of Science*, vol. xlviii. p. 445), that in North America, "the North Low [pressure] and the South High [pressure] belts vary in latitude directly with the solar intensity, being further north at the maximum, and further south at the minimum of the period; while the North High and the South Low belts vary inversely, that is, are further south during the maximum of sunspots."

We know that northerly wind generally means cold, and it would be interesting to trace the effects of the apparently cyclical variation in those winds, above indicated, on health and other matters.

A. B. M.

"Perlites."

Now that attention has been called in NATURE (December 12, 1895, p. 135) to two papers, by Mr. Watts and Mr. Smeeth respectively, in which perlitic structure is examined with much careful detail, may I protest at once against the use made of the word "perlite" by these authors and by the writer of the note in NATURE? So many terms ("granophyre," "picrite," "granulite," &c.) have been already strained by petrographers from their original meanings, that the fine old rock-name "perlite" may also be in danger. It was invented by Beudant in 1822 ("Voyage en Hongrie," tome i. p. 329), as a translation of the German *Perlstein*, and is the name of a glassy rock having a particular structure. It cannot be also used for the globules or cracks which characterise that structure.

GRENVILLE A. J. COLE.

Royal College of Science for Ireland, Dublin, December 13.

The Discovery of the Anti-Toxin of Snake-Poison.

No one has accused Prof. Fraser of claiming priority for his results published in June 1895 over those of Calmette published in May 1894, and over those published by the same investigator in April 1895. Such a proceeding on Prof. Fraser's part would indeed have been rash.

What I have drawn attention to is that when publishing a detailed account of experiments identical with those already published by Calmette, and when drawing conclusions from them similar to those already formulated by Calmette, he omitted to refer to Calmette's published work *in such a way* as to fairly direct attention to the fact that he (Fraser) had been completely anticipated by the French observer. I showed that this had led other persons not conversant with the progress of this branch of scientific inquiry to claim for Prof. Fraser the priority which it would certainly have been unwise for him to have claimed for himself.

I supposed that Prof. Fraser would have been glad of the opportunity of expressing regret for his omission—regret which others must feel though he apparently does not. The theory put forward by Prof. Fraser that it is not usual in communications to the Proceedings of a scientific society *extending to twenty-seven pages octavo in length*, to give more than the very briefest allusion to the latest work on the subject carried out and published by another worker and anticipating all that you have to say, is not, I think, admissible. Especially, it seems to me, is it unusual that the reference to an immediate predecessor's work should be so brief as to appear contemptuous, and so expressed

as to be actually misleading (even when read by experts) in regard to the total absence of novelty in the experiments and conclusions which you are about to record as your own work.

Prof. Fraser read one paper to the Royal Society of Edinburgh on June 3, and a second on the same subject on July 15. It is impossible to imagine how many such preliminary statements Prof. Fraser would consider it right to publish, and how long a time he would allow to lapse before making the statement which one would have thought should have been preliminary to them all, viz. that the experiments have been already made, and the results published by Calmette.

London, December 22.

E. RAY LANKESTER.

Male of *Apus*.

THE male individuals of *Apus caucrisiformis* are so rare, that it appears worth while recording the occurrence of one amongst the specimens used in the Zoological Laboratory in Oxford, during the ordinary course of our work. As Kozubowski showed in 1857, the only external sexual difference is the absence in the male of the egg-sac on the sixteenth appendage, known as the oostegopod of the female. This limb in the male is quite similar to its neighbours: there are no appendages modified for holding the female, such as occur in the allied form, *Branchipus*. It is generally stated that the male of *A. caucrisiformis* is about one-third the size of the female; whilst Lubbock found that the male of *Lepidurus productus* is larger than the female. The present male did not differ in size from the females; some of which were slightly larger, others smaller.

Oxford, December 18.

W. B. BENHAM.

The Merjelen Lake.

It may help Dr. Du Riche Preller to a precise knowledge of the condition of the Merjelen See, prior to the last *débâcle*, to inform him that on August 3 of the present year the water-level was about 60 feet below the strand-line marking the level of the col by which the lake drained into the Viesch valley. There was at that time an upper as well as a lower lake.

I have a number of photographs which show different aspects of the lake, and I do not doubt but that fairly accurate determinations of the water-level could be obtained from them.

PERCY F. KENDALL.

The Yorkshire College, Leeds, December 17.

THE PARIS ACADEMY OF SCIENCES AND THE ROYAL SOCIETY.

AT the recent anniversary meeting of the Royal Society, M. Marey, the President of the Paris Academy of Sciences, attended in his official capacity. Upon returning to France, he gave an account of his visit, and his remarks are reported in full in the *Comptes rendus* of the meeting of the Academy on December 9. The pleasant relations that exist between the Royal Society and the Paris Academy furnish standing evidence of the truth that the interests of science are international, and M. Marey's remarks on the work in connection with the Catalogue of Scientific Papers show how closely those who are devoted to the advancement of scientific knowledge are bound together. His visit is the visible sign of the kindred feeling which prevails among French and British men of science. In October last, many of our leading workers in science, art, and literature were the honoured guests of the Institute of France, and we may regard the return visit of the President of the Academy of Sciences to the Royal Society as an official expression of appreciation. It is on this account, and because the visit was a matter of unique consequence, that we print literally M. Marey's address to the Paris Academy.

"Je dois rendre compte à l'Académie, des résultats d'une mission que je viens de remplir en Angleterre. La Société Royale de Londres m'avait invité, à titre de Président en exercice de votre Compagnie, à assister aux fêtes anniversaires de sa fondation.

"C'est donc à notre Académie que s'adressait l'accueil si honorable qui m'a été fait à Londres. J'y ai entendu le Prési-