

raised to 100° C. and subsequently protected from contamination. He has been convinced that his supposition on this subject was erroneous. And since this period, whilst I have been careful to undertake fresh researches concerning the death point of Bacteria, he has been content to rest in the stage of mere supposition on this most important point, and is now, as it appears, quite unprepared to question the truth of my assertion that Bacteria are killed at 60° C. It is right that the public should know this, and I only regret that Dr. Sanderson himself cannot be induced to inform them as to the real extent of his knowledge upon this part of the subject.

II. CHARLTON BASTIAN

University College, Oct. 20

#### Foreign Orders

THE acceptance and refusal of foreign orders by British subjects has hitherto been universally misunderstood. The existence of the Queen's Regulations, which you have reprinted in your columns (vol. viii. p. 481), prohibiting the receipt of these orders without special permission, must, after the discussion which took place in the House of Commons during last session, surprise many of your readers, who will naturally ask why regulations so stringent and so habitually disregarded, have been either kept entirely private in the Foreign Office, or, if published, have never been followed up. As it is, I will venture to say that not one out of some hundreds who have received foreign orders are aware of the prohibition or have any obvious means of becoming aware of it. Announcements of the presentation to British subjects (and it is assumed acceptance of by them) of such orders habitually appear in the most conspicuous type of the most widely circulated papers, but never a hint on the part of the Foreign Office that the recipients are violating Her Majesty's rules, as drawn up by itself and signed by the Secretary of State for Foreign Affairs.

Such being the case, it is somewhat singular that the Foreign Office should issue regulations approved by Her Majesty, forbidding British subjects to accept or to wear foreign orders and their decorations, except in the very rare cases in which Her Majesty's permission is obtainable, and yet take no steps through its agents at foreign courts to instruct the habitual givers that Her Majesty not only disapproves of their action, but requires of her subjects to tell them so in the most ungracious of all ways, namely by refusing to accept their favours, and returning the tokens thereof.

Surely if the prohibition to accept is wise and good (and I am the last person to doubt Her Majesty's wisdom) the obvious course for the Foreign Office to pursue is to inform all foreign Sovereigns of the fact, and instruct British subjects to transmit any orders that they may receive or have received to the Foreign Office to be returned to the sovereign who sent them, if the services of the recipient are not of such a nature as to enable him to obtain permission to accept them.

Into the merits of the prohibition I am not disposed to enter at much length. That foreign orders are comparatively valueless in themselves is generally admitted; and it is well understood that not a few are to be had for the asking by men of real or supposed eminence, and others by solicitation from men of no eminence at all, or of doubtful eminence. It would surprise your readers to know how many of these orders there are in the possession of their countrymen, whose habitual disregard of such honours leads them in most cases to toss them into a drawer and say nothing about it to any one but their wives, who think they would suit their necks better than their husbands' long-tailed coats.

Some few (very few) no doubt have a definite scientific or literary value; but so long as the British public are entirely ignorant of this value, they will be held in no higher estimation than the others, nor do I see any way by which the value of a foreign order could be made known and recognised, or by which the title of the recipient to wear it could be appraised.

I believe that it is to the rarity of British orders that any desire to obtain foreign ones is mainly due. Had we more, or none, their value would diminish or expire; as, however, I am not prepared to propose either the restriction or multiplication of British orders, a third alternative might be suggested to the Foreign Office, and that is the command to wear them if accepted; which would result in a display in our *soirees* and assemblies of which men of eminence would be heartily ashamed, and lead to a petition for relief, that would be followed by an abandonment of the practice of giving by the powers that be.

D.C.L.

#### Mr. Forbes on Mr. Mallet's Theory of Volcanic Eruption.

I DO not intend to depart from my purpose, as stated in my last (NATURE, vol. viii. p. 485), to have done with further controversy. I must, however, beg your permission to correct a statement as to a matter of fact which constitutes the prominent feature of Mr. D. Forbes' letter on the above, and which is published in the last number of NATURE.

Mr. Forbes says, and begs your readers to remember that his remarks [namely, in his original review of my translation of "Palmieri"] were altogether directed to the assertions contained in my introductory sketch, and not *comments upon my theory of volcanic energy*—of which Mr. Forbes now says we, viz., he and your readers, as yet know little or nothing. That is to say, nothing beyond what is given in the abstract in the Proceedings of the Royal Society and in my Introduction to Palmieri.

Mr. Forbes' review (NATURE, vol. vii. p. 259) which called forth this correspondence, was no doubt confined to my translation of, and introduction to, "Palmieri's Vesuvius," &c. But in that same introduction was contained a sketch of my theory of volcanic energy—upon which Mr. Forbes deemed himself warranted to make his sweeping condemnation—that it was not probable that this hypothesis will receive the adhesion of either chemist, mineralogist, or geologist.

If this were not a comment upon my theory of volcanic energy I know not what a comment means.

My complaint has been that it was a comment condemnatory—based on erroneous as well as inapplicable premises—and made at a time when, as Mr. Forbes himself in his last admits, he knew very little about that theory, as fully expounded in my paper in the Phil. Trans.

ROBERT MALLET

Oct. 28

#### Settle-Cave Report

I HAVE just read with considerable astonishment Mr. Tidde-man's letter (NATURE, October 23) relating to an abstract which I never saw till to-day, and for which, therefore, I am not responsible. The whole question of the antiquity of cave-deposits as well as that of those in the Victoria Cave, in particular is treated in my work on "Cave-Hunting," shortly to be published, and therefore I see no reason for entering into any argument based on the distribution of the Pleistocene Mammalia, or to depart from my rule of not entering into a controversial correspondence.

W. BOYD DAWKINS

Owens College, Manchester, Oct. 24

#### The Oxford Science Fellowships

I WRITE to confirm Prof. Clifton's letter (in the last number of NATURE) respecting Mr. Perry and Oxford Science Fellowships. Nothing, it seems to me, can be more conclusive than the way in which Mr. Perry's letter has been answered. Any remark further of mine on this point would be superfluous.

I will only say that, in the practical part of the examination, no subject could have been chosen better fitted for giving perfectly fair play to all concerned. If it were possible to imagine that any advantage was given, it was, by the choice of the subject, given to those who were unacquainted with the University laboratory.

In conclusion—far from being looked on as an unwelcome intruder, I met with from all, whether candidates or examiners, the most generous courtesy and kindness.

Cambridge, Oct. 24

THE CAMBRIDGE B.A.

PROFESSOR CLIFTON cannot have considered what a great mistake I have been the victim of, or he would not in his hastily written attempt to defend the general science arrangements at Oxford, have forced me to the following explanation. He knows that I stated my case fairly, and he might surely have given credit for this whilst letting us have the benefit of his later information.

I have not at hand a copy of my letter to the Warden. I am quite sure that I told him I was a graduate of the Queen's University in Ireland. The Warden simply directed me to the short notice in the *Times* (afterwards given in your columns), said that the election would not be limited to graduates of Oxford, and would altogether depend on the results of the examination held at Merton on Oct. 7. I thought this letter perfectly satisfactory