

present at the discussions in the Committee of Recommendations, may be able to throw some light on which of the two projects M. Moritz is himself most desirous of pressing. I may at the same time remark that the Committee appointed to aid in the observatory project can take no official cognizance of the survey in the Caucasus.

.. My object in addressing this letter to you is to obtain either from yourself, or through your intermediation from other Officers of the Association, or from the President of the Section by whom the recommendation was brought forward, any information which they can furnish which may be useful to Sir C. Lyell in the communication he will have to make with the Russian Government. It is important to keep in view that, whilst we desire to give every proper aid to Professor Moritz's wishes, we should have at the same time a clear understanding of the recommendation we are making in all the lights in which it may be viewed. Will you therefore kindly return me this letter, after you have communicated its contents to any person who you think may throw light on any of the points touched upon, and accompanied by any documents referring to the recommendation which may be in the hands of the officers, or which they may be able to procure? I will then communicate with the other members of the Committee.

“ Sincerely yours,

“ EDWARD SABINE.”

“ *William Hopkins, Esq.,*
General Secretary of the British Association.”

At the time when my letter reached Mr. Hopkins he was already suffering from the illness which has since obliged him (to the general regret) to resign the Secretaryship. My letter was, however, immediately sent to Mr. Galton, associated with Mr. Hopkins in the duties of the Secretary's office, who most readily and promptly undertook to communicate with Professor Moritz himself, who had returned to the continent; and also to make my letter known to Sir Charles Lyell, the President of the Association, by whom any direct application, either to the Russian Government or to our own, should such an application to either Government be deemed expedient, would have to be made.

Mr. Galton's letter to myself, of Feb. 27 (marked No. 2), states the result of his communication with Professor Moritz, and was as follows:—

No. 2.

“ 42 Rutland Gate, W., Feb. 27, 1865.

“ MY DEAR GENERAL,—I have at length received a letter from Professor Moritz, dated Feb. 5 (? old style), which I enclose. It is not satisfactory, for it does not reply to all my questions; nevertheless you may possibly find it sufficient to afford a basis to some limited action.

“ 1. Professor Kupffer is stated to approve of Professor Moritz's scheme, and of the resolution of the British Association.

“ 2. The funds to carry the scheme into effect would be supplied, if at all, by the Russian (? Imperial) Government, through the Grand Duke Michael, Lieut. of the Emperor in the Caucasus. His decision is final, and to him the resolution of the British Association would be most properly addressed.

“ 3. Professor Moritz wishes to obtain a self-registering apparatus of the Kew pattern, partly to afford comparative observations with those he proposes to make (by means of portable instruments) at the chief geodetical stations of the Caucasus survey. He also wants the self-registering instruments for regular work at Tiflis, where he deprecates the insufficiency of assistants capable of making two hourly observations.

"4. He does not say whence he proposes to obtain the above mentioned portable instruments, nor does he say anything concerning the tabulation of the photograms of the self-registering instruments; nor of the reduction of the observations, nor of their application to theoretical conclusions. Neither does Professor Moritz give cause to believe that he has had, as yet, the necessary experience to enable him to establish a regular magnetical observatory. (I pointedly made inquiries of him on this very subject in my second letter, dated Feb. 3.)

"The final paragraph of Professor Moritz's letter is his own version of what took place at the Bath Meeting, and for that he is alone responsible. It apparently has formed part of some report he has made to the Grand Duke, who commissioned him to attend the Meeting.

"I herewith return your letter of Nov. 9, addressed to the General Secretary. It has formed the basis of both my letters to Professor Moritz.

"Yours very faithfully,

"Major-General Sabine, R.A."

"FRANCIS GALTON."

On the receipt of Mr. Galton's letter of Feb. 7 I wrote to M. Kupffer, then at St. Petersburg, referring to the resolution passed at Bath, and to Professor Moritz's communication with Mr. Galton, and expressing a desire to be guided by his advice in any further step which it might be advisable to take.

It had been previously arranged between M. Kupffer and myself that he should be in London in April or May of this year, for the purpose of discussing many questions bearing on magnetical and meteorological observations. In reply to my letter he referred to his proposed visit to London as a suitable time to discuss fully the subject of Professor Moritz's wishes, at which discussion it was my intention to have asked Mr. Galton and the members of the Committee joined with myself in the resolution of the General Committee to be present. But in May I received the intelligence of M. Kupffer's unexpected death, and I have not yet learnt who has been, or is to be, appointed his successor.

EDWARD SABINE.

September 1, 1865.

Appendix to Report of the Committee on the Distribution of the Vertebrate Remains from the North Staffordshire Coal Field. By JOHN YOUNG, M.D., F.R.S. Edinb.

In the large series of specimens obtained by Mr. Molyneux, the genus *Palæoniscus* is numerically the most important. The vast majority of the specimens are referable to two species, *P. ornatissimus* and *P. Egertoni*. The variations in the proportions of the body and sculpture of the scales admit of a series being established so gradual that at no point can a sharp distinction be drawn between the two species. The occurrence on individuals in this series, of scales identical with those of *P. monensis*, renders it probable that the last-named species, founded on isolated scales from Anglesea, is only a variety of the North Staffordshire forms, the difference in conjectured bulk being perhaps due to local conditions. A small number of specimens belong to *P. striolatus* or *P. Robisoni*. The comparison of these specimens, and others elsewhere, with the types in the Royal Society's collection at Edinburgh, raise doubts in the writer's mind as to the distinctness of the two species. In