

As Mr. Keeping has distinctly stated that my father was "clearly wrong" in putting the Lower Headon Freshwater above this bed, and that he had been unable to convince him of his error for reasons which he assigns (my father, however, never had any communication with him, I am sure, on this, or, I think, on any other subject), I trust that he will see fit to apologize to my father's memory, and bear witness to his accuracy instead of impugning it.

The Paddy's Gap bed is the one which Prof. Judd in his letter says "appears to have been first discovered by the late Mr. Edwards about the year 1840." That at Meadend, on the contrary, was discovered by my father in July, 1843, and was unknown to Mr. Edwards until he joined us a fortnight after. It is an important bed, for it shows the transition from the Upper Eocene to the Lower Oligocene in England, and seems to me to have the same "gisement" as the "Laekenian" of the Belgian area, though from the latter (as well as the "Bruxellian" below it, which is regarded as the equivalent of the Barton Clay) being purely marine, while the Meadend Bed is very fluvio-marine, there are not many species in common; and there are more common to it and the "Sables moyens" of the French area. It is rich in fossils, and it is most desirable that a proper list of the shells from it should be published. Were I physically capable of properly examining the Edwards collection at Kensington, I would make this; but I cannot trust merely to the materials I have, and which alone are available to me to make it.

Nov. 14th, 1883.

SEARLES V. WOOD.

THE RUSSIAN TERTIARY.

SIR,—Dr. Trautschold commences his article in your November Number, by referring to geology having entered the order of exact sciences, and concludes it with the remark that "evidently during the whole Tertiary period the land [of the northern half of Russia] was deprived of vegetation till the Diluvial period," and an inquiry whether this should not be attributed to a great accumulation of ice in this part of the earth during the Tertiary period.

Considering that the vegetation of a temperate climate flourished during Eocene or Miocene times (probably during both) in Spitzbergen, in lat. 80°, and that the Tertiary beds of the province of Cherson in lat. 51°, in South Russia, contain a molluscan fauna of a tropical character, about half the species published from which are identical with, and nearly all the rest closely allied to species from one or other stages of the Eocene, and Oligocene, of England, France, Germany, and North Italy, and that this Eocene and Oligocene extends, between latitudes 44° and 52°, across the meridians from 0° to 35° (east of Greenwich), the longitude of Cherson, while Spitzbergen lies between the meridians 10° E., and 25° E., it seems to me simply impossible, upon any hypothesis of climate whatever, that this inquiry can be answered in the affirmative; and that the making it is scarcely in accordance with that exactness which Dr. Trautschold assigns to the science of geology.

Nov. 14th, 1883.

SEARLES V. WOOD.