

DISCUSSION AND CORRESPONDENCE.

'AN AMBITIOUS PARADOXER.'

HISTORY tells us of a man whose great pride and boast it was that he had once been kicked by the Duke of Wellington. Mr. Stephen H. Emmens, whose advertisement appears in SCIENCE of February 19th, seems to be moved by a like ambition, only, the great Duke being dead, he has to get men of lower rank to perform the ceremony. Only thus can I explain his advertisement in which he cites a number of names of scientific men, my own among them, as having written in such a manner 'as to show that they regard his arguments and mathematical demonstrations as incapable of refutation.'

I have never even seen Mr. Emmens' book, and experience taught me long years ago that any attempt to cure that special mental condition of which he is a victim by reasoning or explanation was futile. I therefore have long ago made it a rule neither to address any argument or comment to that class of people, nor tell them what I think of their vagaries. To fill the cup of Mr. Emmens' happiness, I shall only add that he is entitled to the highest place in the class to which he belongs.

S. NEWCOMB.

FORMER EXTENSION OF GREENLAND GLACIERS.

FROM Professor Tarr's letter in the last number of SCIENCE, under the above heading, it would appear that he is disposed to insist upon an erroneous interpretation of the views of Professor Salisbury and myself after the error has been explicitly pointed out. It appears that on the basis of my general inference "that the ice formerly so extended itself as to reach the coast over about half its extent, while in the remaining portion the ice fell short," Professor Tarr inferred that the area which he studied fell within the portion in which the ice did not reach the coast. He further assumed that the angularity of outline which he observed in a region which had been glaciated was the angularity from which we inferred non-glaciation. In the editorial in the *Journal of Geology*, to which he refers, it was explicitly pointed out that the region between Disco Island and Melville Bay, within which Professor Tarr's studies lay, was regarded by both Professor Salisbury

and myself as having been glaciated in general. Only some of the higher peaks which were not visited by Professor Tarr, and which rose to heights greater than any observed by him, and some lee faces were excepted. It was also pointed out that the topography of the region was not classed by us with the rugged unsubdued type from which we inferred non-glaciation. On the contrary, we looked upon it as being partially subdued, and as indicating partial glaciation, a view which is precisely consonant with the determinations of Professor Tarr, and is substantially confirmed by them. Professor Tarr has thus unwittingly emphasized, by his attempt to place us in error, the fact that the difference between a wholly unsubdued and a slightly subdued topography can be detected by passing observers with no better facilities than a coasting vessel and good field glasses. When his photographs shall be published it will remain for glacial experts to determine whether the topography gives indication of the feeble glaciation that took place and was detected by us, or not, and whether experienced students of glacial topography can reasonably be expected to catch and correctly interpret such indications in passing or not. I predict with the utmost confidence that expert judgment will at once classify the topography studied by Professor Tarr precisely as Professor Salisbury and myself classified the topography of the general tract in which it is embraced. I feel confident that Professor Tarr will not be sustained in calling the topography of the upper Nugsuak peninsula unqualifiedly 'rugged' and 'angular,' but that, on the other hand, it will be pronounced partially subdued and obviously glaciated. I think it will then become evident that Professor Tarr's error lies, first, in a lack of sufficient care in interpreting our statements, and second, in identifying the feebly glaciated topography, which he studied, with our unsubdued topography, and in assuming that the topographic effects of glaciation cannot be detected even where some measure of ruggedness—even a large measure of ruggedness in the common gross sense of the term—may remain.

It was pointed out in the editorial that I recognized an extension of ice in the general region of Professor Tarr's studies essentially