concretions can almost as readily be construed into the forms of Natica, Nerita and Paludina as they are shown in the somewhat similar clays of the Port Hudson age, on the islands of Petite Anse and Côte Blanche. Here every degree of transition from the almost perfect shell into the roundish concretions can be traced; and I do not despair of a similar state of things being found within the largest calcareous deposit of the Grand Gulf area on the Anacoco when it shall be examined more at leisure than it was possible for me to do in 1869.

So far then as the central portion of the Grand Gulf formation in Mississippi and Louisiana is concerned, I see no escape from the conclusion that the sandstones and associated clays are rightly considered as being of one and the same geological age and formation, whether representing the upper Oligocene or later stages of the Tertiary. hiatus between it and the Lafayette is emphasized alike by the extension of the latter two hundred and fifty miles farther inland, and by the totally changed lithological character of the materials, a change so great that it is hard to believe that the same Gulf waters should have produced both at any short interval of time. The conformity of the Lafayette to the Grand Gulf, referred to by Dr. Dall, is rather a delicate question when dealing with a formation of which stratification lines and dips are hardly predicable. Lafayette overlies the Grand Gulf as it overlies every other formation in Mississippi and Louisiana, and it is there undoubtedly the next succeeding formation; but intervening beds may be found elsewhere. What was the nature of the event that caused the remarkable change in the whole nature and distribution of the two deposits must still, I think, be considered an unsolved problem.

E. W. HILGARD.

Berkeley, Cal. July 22, 1903.

## ANTARCTICA.

To the Editor of Science: My many American friends will be amused by the innuendo that I hate Americans which runs

through Mr. Balch's notice (in your issue of July 10) of my review of his book in the Geographical Journal for May. It has always been a privilege of men of science to criticise each other's work as if they were members of one family, and I can conscientiously say for myself that I am without prejudice as to race, creed or nationality. Should I or any other European geographer differ from Mr. Balch or Fanning or Morrell, it is not because they are Americans and we are not, but because we think that in certain points they are mistaken.

The Atlantic is too wide for a comfortable controversy in a weekly journal to be conducted across it; and I do not think it would serve any useful end to reply to Mr. Balch's letter in detail. I fear that my review is too long for you to reprint, but nothing shorter would give a correct impression of my opinions on the points dealt with in Mr. Balch's very stimulating book. I should be glad if both were widely read.

Yours is a land of millionaires; the Antarctic is still scarcely touched by explorers, and all nations would rejoice to see a well-equipped American expedition sent out to help to solve the present problems which after all are those most nearly concerning us.

HUGH ROBERT MILL.

62 CAMDEN SQUARE, LONDON, N. W., July 21, 1903.

## SHORTER ARTICLES.

## A NEW MOSQUITO.

Since mosquitoes have attracted so much attention of late through the part they play in the transmission of certain diseases, anything new that pertains to them or their life history may be of importance. In view of this fact, a brief description of a new species—which has been given the name of Eucorethra underwoodi—should be of interest. While this particular insect does not bite, and for this reason should not perhaps be regarded as a true mosquito, it has, however, been classed as one since it belongs to the family Culicidæ. The larvæ of this insect were found by me on January 27, 1903, in the Maine woods in the eastern