Significance of the Oyster Distribution.

The presence and absence of the oyster (*Ostrea virginica*), in certain localities, depend, we know, upon many delicate and somewhat inappreciable conditions, hence its apparently erratic distribution, and absence from most of the Nova Scotia shore and the New Brunswick side of the Bay of Fundy, over most of which coast line the Acadian fauna is recognized. Schmitt is inclined to attribute the stunted character of so many Gulf species, at any rate those along the north or Quebec shore, as due possibly to lack of food in the water "Ce nanisme," he says, "est peut-être en partie par la rareté de la nourriture résultant du peu de matières organiques en suspension et par le milieu relativement froid où l'animal ne trouve pas son optimum de croissance." The field of biological investigation is thus not merely remarkable for its geographical extent but for the complex and profoundly interesting factors, physical, chemical, etc., which determine its faunistic features.

Comparison of North Sea and Gulf of St. Lawrence.

Now, we know that such a body of water as the North Sea which is very shallow and includes a number of banks, famous as fishing grounds, has a low bottom temperature, indeed a great part of its floor, especially towards the north is covered with a stratum of cold water. This cold stratum is traced to the Polar current, while above this is the warmer inflow of the Atlantic current, still retaining something of the Gulf Stream influence. But the average depth of the North Sea is less than one hundred fathoms, over a great part of the one hundred and forty thousand square miles constituting its area; shallowing most markedly, moreover, towards its southerly margin.

The northern portions range from 160 to 306 and 400 fathoms, and still further north, deepen into the watery abyss of the Norwegian Sea, which shows 2,000 fathoms.

The famous fishing banks are much scattered; but the principal, the Dogger, lies about seventy miles directly east of Flamborough Head, Yorks, and runs north-easterly for 150 miles, being sixty miles across at its greatest breadth. The depth is only seven to twenty-four fathoms, deepening towards the north-east, and at the Great Fisher Bank increasing to forty-five and fifty fathoms. Off its southwest extremity are the Silver Pits,—a fishing bank sixty miles long,—and the depth is there twenty-five to fifty fathoms. Southeast of the Dogger are Cromer Knowle, twelve to eighteen fathoms deep, and the Leman and Dowsing Banks.