

ice on the Lower Loire. But the constant features of the three past winters have been the relatively small rainfall, the high barometer, and, for the first two years, the absence of the sardine on the coast during the following summer.

Mr. Blavier, president of the Main-et-Loire Industrial Society, has recently read a paper before the Academy of Sciences, in which he accounts for these facts by the alleged displacement of the Gulf Stream, one branch of which ordinarily leaves the coast of the Bay of Biscay, rendering the climate very much warmer than that of corresponding latitudes in North America. The sardine always follows this warm current, and has now accompanied it in the new path which it has made for itself in the ocean. According to Mr. Blavier, the fishermen have no reason to anticipate a good catch until the breaking up of those great ice masses in Baffin's Bay which, it is believed, have for several years obstructed the flow of that cold arctic current by contact with which off the Banks of Newfoundland the Gulf Stream has hitherto been deflected toward Europe.

If this view be correct, the coming season will be as unproductive as those which have preceded. In that case the misfortune of the Vendean and Breton fishermen, however regrettable in itself, cannot fail to encourage the "sardine" industry which has already acquired so considerable a development in the United States.

UNITED STATES COMMERCIAL AGENCY,  
Nantes, April 3, 1882.

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**GROWTH OF GERMAN CARP SENT TO SAVOY, TEXAS, BY THE  
UNITED STATES FISH COMMISSION.**

**By SAMUEL JOHNSON.**

(Letter to Prof. S. F. Baird.)

My carp which you sent me the 10th day of January last are doing well. Some of them are eight inches long. The shorest one that I received was one and a half inches long then and is four inches long to-day. They grow like China pigs, when fed with plenty of butter-milk. I feed them on the scraps from the table. They love good biscuit the best. They eat meat, bread, salad, or worms, and everything I give them. They are perfectly gentle and come at the rattle of a sheep's bell to be fed. I feed them as I would chickens, and intend to feed them every day. I have plenty of water for thousands of them. I would not take one hundred dollars for what you sent me. I can make them weigh five or six pounds this summer by feeding them well.

SAVOY, TEX., April 24, 1882.