REPORT ON THE CONTENTS OF TWO BOTTLES OF WATER FROM THE GULF OF MEXICO, FORWARDED BY THE SMITHSONIAN INSTITUTION.

## By DR. W. G. FARLOW.

When received in Cambridge, May 14, 1881, the water of both bottles gave out an excessively disagreeable odor of putrefying organic matter, and ammonia was given off in considerable quantities, as was shown by holding a rod moistened with hydrochloric acid over the mouths of the bottles. In one bottle there was a greenish-colored, slimy deposit an inch deep, and the water above was clear. In the second bottle the water was turbid throughout and of rather a brownish color.

The microscopic examinations showed that the contents of the two bottles were alike. The greater portion of the matter contained in the water consisted of a mass of amorphous slime, in which were numerous crystals, apparently of a fatty nature. There were, besides, a large quantity of eggs of some animal, which were easily recognized, although partially decomposed, and the remains of small crustacea. In addition to the animal substances mentioned were remains of plant tissues, leaves and young stems, pine pollen, and diatoms of four or five different species.

From what has been said, it is evident that the slime in the water must have been at some time not far from the land, or else that the bottles used, or the water after it had been collected, must have been exposed to the air for some time.

It is my opinion that the trouble is not caused by the presence of any vegetable substance, but that the presence of the latter is accidental. The slimy mass probably originated from a mass of eggs which, for some reason or other, were killed near the surface of the water, and the smaller crustaceans in the neighborhood have been involved in the general mass of slime.

## REMAINS OF THE WALRUS (?) IN MAINE.

## By C. H. BOYD.

Addison Point, Washington County, Maine, October 8, 1881.

DEAR SIR: I have the honor to make the following statement of finding the partly fossilized bones of a walrus (?), in expectation that it may possibly prove of interest in connection with investigations of the Smithsonian, as tending to show the range of the walrus thus far south, or that this climate was more Arctic in time past.

<sup>\*</sup>This water was collected where the fish mortality, referred to in preceding pages, was the greatest.

Yesterday, hearing that the bones of a large animal were washing out of a clay bank at Reef Point, on the eastern side of the Pleasant River, 3 miles below this village, I visited the spot to see some of the remains in situ. I then dug out several pieces of rib and a forearm.

The Point, which is in cultivation, is 15 feet above high water, and has been washing away for many years. Mr. Oliver Look, the owner of the property, informs me that it has washed off 100 feet within the last sixty years. He also showed me a tusk with a portion of the socket attached, which he dug out here a few days since, and from which I judge the remains to be those of a walrus. I inclose a rough sketch and also a small piece of scale from the tusk that came off in my hand while making the sketch. These bones are in stiff blue clay about 2 feet above high water in a nearly vertical bank, there being 6 feet of the clay above them and above that some 6 feet of gravel and soil.

Nearly opposite, on the west side of the bay, I found a kitchen midden, now covered with a growth of hard wood. From it I obtained, by digging, three pieces of chipped flint and a bear's tooth.

The exact location of both these "finds" can be obtained, if desired, from our topographical sheet now in progress, by application to Professor Hilgard, assistant in charge of the Coast and Geodetic Survey.

Very respectfully, your obedient servant,

C. H. BOYD, Assistant, C. and G. Survey.

Prof. Spencer F. Baird, Secretary Smithsonian Institution.

## DIRECTIONS FOR COLLECTING AND PRESERVING FISH. By Tarleton H. Bean.

- 1. Wash the fish thoroughly in water, to remove the slime and dirt that are almost invariably present upon them, not omitting the inside of the mouth and the gills. In cleansing fish that have a tough, scaleless skin, or such as have the scales firmly fixed, use a stiff paint brush or a scrubbing brush; for thin-skinned fish and such as have deciduous scales, a softer brush must be taken. Some fish are covered plentifully with tenacious mucus that is with great difficulty removed by water alone; in such cases a solution of two tablespoonfuls of alum in a pint of lukewarm water will be found efficacious.
- 2. It is often necessary to preserve fish that are stale, or partially digested, and offensive to the smell. Such examples may be thoroughly disinfected by the use of the disinfecting solution of chloride of soda. Use a tablespoonful of the solution in one pint of water. With this wash the gills, and pour it into the mouth and stomach, allowing it to return by the mouth.