distinction from those that go in schools and are taken with the net, and the bottom-fish seem to be more affected by this water than the others. Numbers of sharks and rays, eels and catfish are thrown up dead on the beach.

I am not aware that there has been any report of this matter made to your commission, or any attempt made at the analysis of the water, and would not have taken the liberty of writing, save for the fact that the greater part of our fishermen are comparatively illiterate. My own opinion is that the state and condition of the water are caused by some volcanic action at the bottom. I may be wrong in my technical names of the fish, but our fish have never been properly classified, and I give you the best I can do.

With a renewed apology for the liberty I have taken, I remain, most respectfully,

M. A. MOORE.

Professor Baird, Commissioner of Fish and Fisheries, Washington, D. C.

## ON THE DESTRUCTION OF FISH BY POLLUTED WATERS IN THE GULF OF MEXICO.

## By W. C. W. GLAZIER, Assistant Surgeon, M. H. S.

TREASURY DEPARTMENT,
OFFICE SUPERVISING SURGEON-GENERAL
UNITED STATES MARINE HOSPITAL SERVICE,
Washington, D. C., December 7, 1880.

SIR: I have the honor to transmit herewith copy of a letter received on the 3d instant from Assistant Surgeon W. C. W. Glazier, of this service, now on duty at Key West, which it was thought might be of interest to you.

Very respectfully,

JOHN B. HAMILTON,

Surgeon-General U. S. Marine Hospital Service.

Prof. S. F. BAIRD,

Commissioner of Fish and Fisheries, Washington, D. C.

UNITED STATES MARINE HOSPITAL SERVICE,
DISTRICT OF THE GULF, PORT OF KEY WEST, FLA.,
Surgeon's Office, November 25, 1880.

SIR: I have the honor to report, as a matter of scientific interest, that it has occurred several times that fishermen returning from the coast of Florida with fish, in an apartment of their boats communicating freely with the surrounding water, have had them die suddenly on reaching a certain kind of water distinguishable by its color. This has

occurred several times, notably about 1865 and in 1878, when large numbers were thrown on the shore at Key West, many of them of very large size, so that perhaps all that came within the influence of the poisoned water perished sooner or later.

There is nothing known as to the origin of the poisonous qualities of the waters that affect the fish in this way, but the prevalent opinion seems to be that there is something emptied into the beds of the freshwater courses from volcanic or geyser-like springs, and that as soon as the water thus impregnated reaches the sea it kills every living thing that comes under its influence.

It has been reported that several smacks have lost their cargoes within the last two weeks, and that the waters of Tampa, Sarasota, and Charlotte Harbor were covered with thousands of dead fish, and that the stench was so great that the vessels were obliged to keep free from them.

Very respectfully.

W. C. W. GLAZIER, Assistant Surgeon, M. H. S.

The Surgeon-General U.S. Marine Hospital Service, Washington, D. C.

## NOTES ON SOME FISHES FROM HUDSON'S BAY.

## By TARLETON II. BEAN.

Two small collections of fishes collected in the Hudson's Bay region, and received by the United States National Museum in 1880, are worthy of note, because fishes from that quarter are rarely added to museums in the United States, and consequently our knowledge of the fauna is limited.

One of these lots embraces the following four species, presented by Walton Hayden, esq., from Moose Factory. The numbers at the left of the name of the species refer to the Museum Fish Catalogue.

27782. Percopsis guttatus Ag.

The dorsal has 9 to 11 developed rays; the anal i, 7; ventral 8; scales in lateral line 47 to 48. Seven specimens were obtained.

27783. STIZOSTETHIUM VITREUM (Mitch.) Jord. & Copeland.

Two young examples about 34 inches long.

27784. Acipenser maculosus LeS.

A young individual  $4\frac{4}{5}$  inches long.

27785. URANIDEA SPILOTA Cope.

One specimen measuring 4 inches without the tail, which is wanting. Vomerine teeth only. D. ix, 18; A. 12; V. i, 4.

From Robert Bell, M. D., Assistant Director of the Geological Survey of Canada, have just come the following six species, all of them collected at the mouth of Nelson River except Cottus labradoricus, which is from