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,

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NOTES ON SOME FISHES FROM HUDSON’S BAY.

By TARLETON H. 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 3½ inches long.

27784. Acipenser maculosus LeS.

A young individual 4½ 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
near York Factory. As the last species has figured among the doubt-
ful ones in our lists of East Coast fishes, I give a somewhat detailed de-
scription of it.

27776. Percopsis guttatus Ag.

27777. Stizostethium vitreum? = (Lucioperca americana Cuv.)

The example is very young and entirely without scales, but the species
is most probably vitreum.


This is the form described as G. nebulosus by Agassiz. It does not
differ from marine pungitius except in its fresh-water habits.

27779. Gasterosteus aculeatus var. gymnurus Cuv.

The few scaly plates on the anterior part of the body are present, but
rudimentary.

27780. Cottus labradoricus (Girard).

Taken near York Factory, Hudson's Bay, by Robert Bell, M. D., As-
sistant Director of the Geological Survey of Canada, 1880.

Br. vi; D. X, 14; A. 14; V. i, 3; P. 17; C. 11 (developed).

Two small spines above the snout; a rough irregular prominence
above each orbit and two similar ones on the occiput. The slight de-
pression on the crown becomes narrower posteriorly where its width is
about one-half the length of the space included between the supraorbital
and occipital prominences. Four preopercular spines, two of which are
at the angle; the uppermost and longest is two-thirds as long as the
eye, but the spine is slightly imperfect; the two lower spines are short
and extend downward and slightly forward. The length of the longest
preopercular spine equals the distance between the eyes measured on
the bone. The long diameter of the eye is one-fifth of the length of the
side of the head, and nearly equal to the length of the snout. The
maxilla is twice as long as the eye, about half as long as the head to
the end of the opercular spine, and extends to about the vertical through
the hind margin of the eye. Teeth on the vomer, none on the pa-
tines. The dorsal spines are slender; the first is twice as long as the
distance between the eyes; the third and longest is five-sixths as long
as the maxilla and one-half as long as the distance from the tip of the
snout to the end of the occipital prominences. The length of the
spinous dorsal base is one-fourth of the total length without caudal.
The interval between the spinosus and soft dorsals is one-half as long as
the eye. The longest ray of the soft dorsal (9th) is about as long as
the middle caudal rays, or one-sixth of the total length with caudal.
The pectorals reach a little beyond the origin of the anal (to the second
ray of the anal); the ventrals are as long as the postorbital part of
the head and do not reach near the vent. Skin above the lateral line
with a few spiny tubercles, none of them more than one-fourth as long as the eye. The specimen sent is a dried individual and its colors cannot be made out. There is a small slit behind the fourth gill. The local name at York Factory is "Miller's Thumb," according to Dr. Bell.

27781. Coregonus artedi LeS. var.

The species agrees in all respects with typical Artedi from the Great Lakes with the exception of its smaller eye. Two larger examples collected at Moose Factory many years ago also have the eye notably smaller than in C. Artedi. The local name at York Factory, says Dr. Bell, is "tulibe." It must not be inferred, however, that the species is at all like Coregonus tullibe, for it is not closely related to this form. Specimens in alcohol are much desired.

U. S. National Museum,

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ON THE MINERALOGICAL COMPOSITION OF THE NORMAL MESOZOIC DIABASE UPON THE ATLANTIC BORDER.

By GEORGE W. HAWES, Ph. D.

In my opinion the Mesozoic "trap rocks" have excited more interest and received more lithological attention than any other defined rock species upon the Atlantic border. There is, therefore, no rock concerning the geological features and chemical composition of which we are so well informed; but much as it has been discussed, the mineralogical composition has, in part, remained a matter of speculation rather than of definite knowledge. As our methods for determining such points are now much more satisfactory, I think that the final determination of the mineral composition of the normal variety of this rock may be accomplished, and this will be of much interest on account of the wide distribution and the uniform character of these diabases.

I will give a few references to show the development of our knowledge of these rocks and the essential uniformity in their composition.

When Perceval wrote, no attempt was made to determine their composition, and their geological features and distribution were chiefly considered.¹

Prof. J. D. Dana has at different times pointed out the wonderful uniformity of these rocks wherever they occur, intersecting the Mesozoic sandstones on the Atlantic border.² He quotes specific gravity determinations by Professor Brush of New Haven, Professor Cooke of New Jersey, Professor Kerr of Raleigh, N. C., and Professor Howe of Nova Scotia, made upon specimens from their respective localities, and

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¹ See Dana's Geology, page 20.

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