tions of that Society), that I have detected coccoliths in abundance, and retaining their normal characters, in some of the fossil siliceous earths of Barbadoes &c., and that coccospheres have been met with by me profusely in a living, or perhaps it would be more safe to say, a recent condition, in material collected at the surface of the open seas of the tropics, and also in dredgings from shoal water obtained off the south coast of England.

It only remains for me to add that, so far as the chemical nature of these bodies can be ascertained by reagents and the polariscope, there is reason to believe that carbonate of lime enters largely into their composition; and they furnish us with another striking example, in which simplicity of structure has enabled an organism to weather the vicissitudes to which the surface of the globe has been subject, and under the operation of which more complex forms have ceased to exist.—*Athenæum for* Sept. 19, 1868.

Transporting Fish alive.

Mr. Moore, the Curator of the Liverpool Free Museum, has succeeded in importing some living fish from the River Plate, the first live fish that he has received from the south of the equator. Some English fish sent out by the same captain arrived safely; and he left Liverpool on the 11th of this month with another series of fish. They were sent out and imported in a common fish-globe suspended like a cabin-lamp, in gimbals.

There are now exhibited in the Liverpool Museum two catfish, three pomotis, two species of *Cyprinus*, four axolotls, and a *Proteus* that were imported from New York by the same method.—J. E. Gray.

On Tetilla euplocamos *and* Hyalonema boreale.
By Dr. J. E. Gray, F.R.S. &c.

It is a curious coincidence that three small-peduncled capitate sponges should be discovered about the same time, viz.:—

1. *Hyalonema boreale*, Lovén, from the North Sea.
2. *Lovenia boreale* of Bocage, coast of Portugal.
3. *Tetilla euplocamos*, Oscar Schmidt, Spongien von Algier, t. 5. f. 10, from Brazil.

There can be no doubt that they are all distinct species; and the spicules show that the North-Sea and Portuguese species must be referred, according to my views, to different families—the one to Halichondriadæ and the other to Tethyadæ. Unfortunately *Tetilla* is not regularly described by Dr. Oscar Schmidt.

It is curious that Dr. O. Schmidt, like Dr. Lovén and M. Bocage, compares the small-peduncled sponge to *Hyalonema*. The *Tetilla* was sent to him from Brazil by M. F. Müller. He observes, "The pear-shaped body is like *Tethya*, and the peduncle is like *Hyalonema*; the body is formed of clustered spicules with abundance of thrice-forked spicules, the forks projecting, and covering the surface

like down; the peduncle is formed of spirally twisted threads, and divides below into a few rootlets:" and he believes that the sponge grows sticking in the mud.

Dr. O. Schmidt kindly sent me a slide with specimens of the spicules of *Tetilla*, but I do not find any trifurcated spicules on it; one of them is figured across the base of the sponge, t. 5. f. 10. It also belongs to Tethyadæ.

On Hyalonema, *Gray*.

Professor E. Perceval Wright of Dublin has just returned from Setuval, where, with the kind assistance of Prof. Bocage of Lisbon, he has succeeded in dredging living specimens of this strange organism. The *Hyalonema*-ground is in a valley, some thirty miles to sea, south-west of Setuval, and is from 400 to 500 fathoms in depth. Prof. Wright "regards the siliceous axis as the stem of the "sponge-mass called *Carteria* by Dr. J. E. Gray, and has deter- "mined that the end of the axis, where the fibres become loose, is "that one imbedded in the mud, the sponge-mass being on the "summit, and presenting forms of very various outline. The "sponge-mass is provided with a number of oscula looking upwards, "these being covered over by a beautiful open network of spicules. "When the sponge-mass is washed away or destroyed, the parasitic "*Palythoa*, which was seen living, and in the act of protruding its "tentacles, grows up over that portion of the siliceous axis which is "left uncovered by the mud; but numerous examples of the sili- "ceous stem exist uncovered by the parasite. The Lisbon Museum "has now, thanks to Prof. Bocage, the most magnificent series of "this sponge in the world." Prof. Wright will shortly publish fuller details of this interesting discovery.

Castle, Dublin, Sept. 22nd.

My Dear Dr. Gray,—Many thanks for your kind note, which I got on my return from the expedition Carpenter and I made to the North Sea * * * * *

Now, as to our expedition. In the mud of the Gulf Stream (at 550 fathoms) we got *Hyalonema* living *upside down*, as I already suspected from Lovén's paper; but, besides *Hyalonema*, we got at least half a dozen new forms of vitreous sponges, most remarkable, and some of them as beautiful as the flower-basket.

Of these you will, of course, get specimens; but in the first place I must clean and prepare them and describe them for the 'Phil. Trans.'

In another locality we got *Brisinga* and the wonderful little Crinoid *Rhizocrinus* * * * * *

Ever truly yours,
Wyville Thomson.