

LETTERS TO THE EDITOR

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Strange Noises heard at Sea off Grey Town

I AM glad to see that the vexed question of the noise heard from under the sea in various parts of the Atlantic and Pacific has been re-opened by a gentleman so accurate and so little disposed to credulity as Mr. Dennehy. The fact that this noise has been heard at Grey Town only on board the iron steamers, not on board the wooden ones, is striking. Doubtless if any musical vibration was communicated to the water from below, such vibration would be passed on more freely to an iron ship than to a wooden one. But I can bring instances of a noise which seems identical with that heard at Grey Town being heard not only on board wooden ships, but from the shore.

I myself heard it from the shore, in the island of Monos, in the Northern Bocas of Trinidad. I heard it first about midnight, and then again in the morning about sunrise. In both cases the sea was calm. It was not to be explained by wind, surf, or caves. The different descriptions of the Grey Town noise which Mr. Dennehy gives, will each and all of them suit it tolerably. I likened it to a locomotive in the distance rattling as it blows off its steam. The natives told me that the noise was made by a fish, and a specimen of the fish was given me, which is not *Centriscus scolopax*, the snipe-fish, but the trumpet-fish, or *Fistularia*. I no more believe that it can make the noise than Mr. Dennehy believes (and he is quite right) that the *Centriscus* can make it.

This noise is said to be frequently heard at the Bocas, and at Point à Pierre, some twenty-five miles south; also outside the Gulf along the Spanish main as far as Barcelona. It was heard at Chagresancas (just inside the Bocas) by M. Joseph, author of a clever little account of Trinidad, on board a schooner which was, of course, a wooden one, at anchor. "Immediately under the vessel," he says, "I heard a deep and not unpleasant sound, similar to those one might imagine to proceed from a thousand Æolian harps; this ceased, and deep and varying notes succeeded; these gradually swelled into an uninterrupted stream of singular sounds, like the booming of a number of Chinese gongs under water; to these sounds succeeded notes that had a faint resemblance to a wild chorus of a hundred human voices singing out of time in deep bass."

He had, he says, three specimens of the trumpet-fish, said to make the noise, either by "fastening the trumpet to the bottom of a vessel or a rock," or without adhering to any object. The whip-like appendage to the tail, which he describes, marks his specimens at once as *Fistularias*.

Meanwhile, it is but fair to say that Mr. W. W. Spicer, a few weeks since, called attention to this "Sirene," or musical fish, in *Hardwicke's Science Gossip*, commenting on an account of its being heard commonly in the Bay of Pailon, Esmeralda, on the Pacific shore, in latitude 4° north. I replied shortly in the same excellent magazine, and offered to write further, a promise which I should have redeemed, had not I understood that my learned friend Dr. Günther, in the meanwhile, was about to write on the matter himself, telling far more than I could have told.

Another instance of this sound being heard on board a wooden ship (and this time again in the Pacific) is given (in p. 304 of Mr. Griffith and Colonel Hamilton Smith's edition of Cuvier's *Fishes*, on no less an authority than that of Humboldt who (say the editors and authors of the Appendix) did not suspect the cause. "On the 20th of February, 1803, toward seven in the evening, the whole crew were astounded by an extraordinary noise, which resembled that of drums beating in the air. It was at first attributed to the breakers. Speedily it was heard in the vessel, and especially toward the poop. It was like a boiling, the noise of the air which escapes from fluid in a state of ebullition. They then began to fear that there was some leak in the vessel. It was heard unceasingly in all parts of the vessel, and finally, about nine o'clock, it ceased altogether. From the narration (says Cuvier) which we have extracted, and from what so many observers have reported touching various Scænoids, we may believe that it was a troop of some of these species which occasioned the noise in question."

For there is, without doubt, a great deal of evidence to show that certain Scænoids make some noise of this kind. The

Umbrinas, or "maigres" of the Mediterranean and Atlantic are said to be audible at a depth of twenty fathoms, and to guide the fishermen to their whereabouts by their drumming. The fishermen of Rochelle are said to give the noise a peculiar term, "seiller," to hiss; and say that the males alone make it in spawning time; and that it is possible, by imitating it, to take them without bait. The "weak-fish" of New York, (*Labrus squetaquee* of Dr. Mitchell) is said to make a drumming noise. But the best known "drum-fishes" are of the genus *Pogonias*, distinguished from *Umbrina* by numerous barbules under the lower jaw, instead of a single one at the symphysis. M. Cuvier names them *Pogonias fusca*, and mentions that "it emits a sound still more remarkable than that of the other Scænoids, and has been compared to the noise of several drums." The author of the Appendix states that these "drum-fish" swim in troops in the shallow bays of Long Island; and according to Schœpff (who calls them *Labrus chromis*) assemble round the keels of ships at anchor, and then their noise is most sensible and continuous. Dr. Mitchell, however, only speaks of their drumming when taken out of the water. Species of the same genus, if not identical, are found as far south as the coast of Brazil; and it is to them, probably, that that noise is to be attributed which made the old Spanish discoverers report that at certain seasons the nymphs and Tritons assembled in the Gulf of Paria, and made the "Golfo Triste glad with nightly music."

How this noise is produced, if the theory be true, I cannot say. Early naturalists looked, naturally, towards the large and strong swimming bladders, observing, at the same time, that these have no communication with the intestinal canal, nor with the exterior generally.

It only remains to me now to quote the opinion of Dr. Günther, to whose courtesy I owe the sight both of the fish and of its pharyngeal and vomerine teeth. He thinks, with later naturalists, that the noise might be made simply by large shoals of "drums" grinding these teeth together, whether in masticating the crabs, &c., on which they feed, or for mere sport.

I would, therefore, request Mr. Dennehy, or any officers of the Royal Mail steamers who may visit Grey Town, to try if they cannot catch a *Pogonias* or two. Of course, finding them there will not prove that they make the noise, but it will be at least one fresh link in a long chain of evidence.

And so I leave the matter, apologising for having quoted from no later authority than the Cuvier of 1834, which is the only book accessible to me; and for myself, "holding it for rashness hastily to avouch or deny aught amid such fertility of Nature's wonders." C. KINGSLEY

[Mr. Kingsley will find references to all the various authors who have written on Scænoids generally, and "Drum Fishes" especially, in Dr. Günther's "Catalogue of Fishes," vol. ii., p. 270 *et seq.*—Ed.]

WITH reference to the communication published in last week's NATURE, on "Strange Noises heard at Sea off Grey Town," it does not appear necessary to refer these noises to any occult galvanic agency, or magnetic influence in connection with iron ships, although at first sight, and more especially as there is much ferruginous sand in the vicinity, and as the sounds are heard only in iron ships, and not in wood-built, copper-bottomed vessels, there seems ground for such an idea. The solution I would venture to offer is that these noises proceed from "musical fish" or shells.

Musical sounds proceeding from under water, agreeing in character with those described by Mr. Dennehy, appear to be known on the western coast of India and on the coast of Chili. A very interesting account of these musical sounds will be found in Sir Emerson Tennent's work on Ceylon, from the author's own experiences at Batticaloa in that island. His impressions as to the gentleness and harmony of the sounds are as vividly described as those of your correspondent from the Royal Mail Ship *Shannon*: and although Sir E. Tennent throws no light on the remarkable periodicity of the phenomenon, yet he gleaned by his inquiries that the sounds were heard at night, and most distinctly when the moon was nearest the full. Your readers will find the details at p. 468 *et seq.*, 2nd vol., Edition of 1859.

The iron ship is, in all probability, from the thinness of the plates, a far better musical sounding-board than the thick-bottomed wooden ships, and here we may have the reason of the delicate sounds not being heard in the latter class of vessel.

It has always appeared to me that this particular locality of