spots*, although they are very faintly represented in the figure attached. It is the same in the case of Lafresnaye's description of his *Brachyptrallus ralloides*, which is to be referred to the stripe-winged species. It becomes evident, therefore, that Mr. Gould has been in error in referring the smaller Tasmanian bird to *Tribonyx Mortieri*; and I propose to call it *Tribonyx Gouldi*, after its discoverer. We may then distinguish the three species (two of which are now living in the Society's collection, where also the third was exhibited alive a few years since) as follows:—

1. Tribonyx Mortieri.

Tribonyx Mortieri, Du Bus, Bull. Ac. Brux. vii. p. 215 (cum fig.). Brachyptrallus ralloides, Lafr. Rev. Zool. 1840, p. 232.

Diagn. Major; alis albo striatis; plaga magna hypochondriali alba.

Hab. Western Australia.

In vivario Soc. Zool. Londin. Specimen unicum !

2. Tribonyx Gouldi.

Tribonyx Mortieri, Gould, Birds of Austr. vi. pl.71; ejusd. Handb. ii. p. 324.

Diagn. Medius; alis immaculatis; plaga magna hypochondriali alba.

Hab. Tasmania.

Nuper in vivario Soc. Zool. Londin.

3. Tribonyx ventralis.

Gallinula ventralis, Gould, Proc. Zool. Soc. 1836, p. 85.

Tribonyx ventralis, Gould, Birds of Austr. vi. pl. 72; Handb. to Birds of Austr. ii. p. 325.

Diagn. Minor; alis immaculatis; hypochondriis nigris, albo guttatis.

Hab. New South Wales, Southern Australia, Victoria and Western Australia (Gould).

In vivario Soc. Zool. Londin.

XIX.—On Hyalonema lusitanicum. By J. V. BARBOZA DU BOCAGE.

Letters addressed to Dr. J. E. Gray.

My dear Sir,

Lisbon, May 25, 1867.

On my return from a journey of a few weeks to our northern provinces I have just received three of your letters, the last of

* "Tectricibus alarum mediis et minoribus cinereo-olivaceis, albo terminatis, et longitrorsum in medio striatis."—Du Bus.

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which informs me that the specimen of Hyalonema sent to M. Ehrenberg has already returned into your possession.

At the same time with your letter, I have received another from Professor Ehrenberg. He persists in believing me the victim of a mystification, and in regarding the Hyalonemas as artificial products manufactured by the Japanese. I will here transcribe for you a portion of his letter, in order that you may judge of the arguments upon which he supports his opinion. It is Professor Ehrenberg who speaks :---

"I am convinced that the officer of customs who procured you these specimens has been deceived by some dealer in objects of natural history, or by travellers coming from Japan, and who have invented the fishery of these bodies near Setubal. It has been possible to *place beyond doubt the presence of cotton threads for the attachment of the different pieces*; there are also on the surface fibres of wool coloured red and green, certainly belonging to some old sailor's garment. The resemblance of this specimen to one of Brandt's figures is so striking, that it is impossible for me to believe that bodies so alike in all their parts can occur both in the Sea of Japan and in that of Portugal, or that these forms could be constructed in a manner so identical in the midst of circumstances so widely separated."

Such are the arguments which lead Professor Ehrenberg to maintain :—1. That the Hyalonemas are artificial products. 2. That the specimens that I possess have been manufactured in and brought from Japan. 3. That they have been sold to my correspondents by natural-history dealers (who do not exist in Portugal), or by sailors returning from Japan to Setubal, which has never, in the memory of man, seen a ship from China or Japan enter its little port!

I have just replied to M. Ehrenberg :-- 1. That the seven specimens which I possess have been sent to me from Setubal by three persons, all belonging to the well-to-do classes of society, and all well known as perfectly honourable. 2. That these persons have received the Hyalonemas at different periods (1863, 1864, and 1865) from well-known fishermen, who brought them precisely in the season of the shark-fishery. 3. That these fishermen had no interest in deceiving, as they could not know the scientific interest of these captures. 4. That these fishermen were always contented with a very modest gratuity (two or three francs) as a remuneration for having brought them. 5. That if the fishermen had the intention of demanding a higher price, instead of announcing them as derived from our coasts, they would not have failed to say that they had bought them from strangers, that this had cost them very dear, &c. Here, as everywhere, exotic products generally pay much better.

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This is pretty nearly what I have replied to Professor Ehrenberg; but I am sure that he will maintain his first notion. It is his *fixed idea*.

There is, however, in what Professor Ehrenberg has written to me a question of fact, which I beg you to verify and get verified. M. Ehrenberg asserts that he has been able to place beyond doubt the presence of cotton threads attaching the different pieces of the Hyalonema. Now I beg you to examine with the utmost care the specimens which you possess, and in which M. Ehrenberg asserts that he has found this proof of *artificial fabrication*, and be kind enough to communicate to me the result of your examination.

For my part I have examined with scrupulous attention the six specimens which I possess; and not one of them presents the least trace of cotton threads, or anything which would lead one to believe in their artificial fabrication. The power of a preconceived idea is such that it will make us see cotton threads and signs of human fabrication in perfectly natural products in which they do not exist!

The confidence with which M. Ehrenberg writes to me about this throws me into the deepest astonishment. On my side there is not the least question of self-love. I am disposed to change my opinion in the presence of good arguments; but I cannot accept as such perfectly absurd hypotheses. I have also just read, in the 'Annals and Magazine of Natural History' (March 1867), the article by M. Max Schultze. He still believes in his sponge; but, although agreeing on this point with Dr. Bowerbank, he does not admit that the polypes also belong to the sponge. Quot capita, tot sententiæ.

Excuse me for having written you such a long letter, and accept, &c.

J. V. BARBOZA DU BOCAGE.

MY DEAR AND HONOURED CONFRÈRE, Lisbon, June 15, 1867.

Professor Ehrenberg's incredulity with regard to the habitat of *Hyalonema lusitanicum* has driven me to undertake a journey to Setubal, in order to obtain all desirable particulars on the spot. The following is a summary of the rigorous inquiry which I have just carried out.

The Hyalonemas are well known not only to the shark-fishers and the proprietors of fishing-boats, but also to several people of good position in the town. They call them "chicotes de mar," that is to say, "sea-whips." It is since 1863 that the sharkfishers have most frequently found Hyalonemas attached to their fishing-apparatus; nevertheless some persons remember having

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seen, long before that period and at long intervals, some speeimens brought from the sea by an old padrone lately dead, called Christovao da Penha.

It is not difficult to explain why the Hyalonemas, having been extremely rare and almost unknown at Setubal until 1863, have become more abundant since that period. We must in the first place take into account the ignorance of the fishermen, who are in the habit of throwing overboard everything that they think useless; but there is another important circumstance that has strongly struck me. Formerly the sharks were more abundant in our seas, and to find them the fishermen of Setubal did not need to depart very far from the shore; but for some years they have had to be sought at greater distances and at greater depths; and it is precisely in these deeper seas and at this greater distance from the coast that the Hyalonemas are found. I must also add that, from information in which I have perfect confidence, the above-mentioned fisherman (Christovao da Penha) was, previous to 1863, perhaps the only one who was in the habit of fishing in the seas at a distance from the shore now frequented by all the fishermen; and this explains quite naturally why this same fisherman was the only one to meet with Hyalonemas in his tackle.

Since 1863 I have received from Setubal seven complete specimens of *Hyalonema* and a large packet of threads belonging to three or four individuals, which makes a total of ten or eleven individuals. Perhaps you would like to know the dates of these acquisitions, the names of the persons from whom I received them, and the names of the proprietors and padrones of boats who captured them.

The first specimen (that which was described and figured by me) was sent to me by M. Garnitto, superior officer of customs at Setubal; it was fished in June 1863 by the padrone Domingo Correia.

In May 1864 I received from M. Garnitto another individual, which was given to him by José Vagueiro, proprietor of a boat, the padrone of which is named Manuel de Souza.

In September of the same year, M. Brito, a landed proprietor at Setubal, presented me with a magnificent specimen and with a large packet of threads, which he had received from Manuel Pedro, proprietor of a boat, the padrone of which is named José Correia.

Lastly, in September 1866, M. Cunha Freire, officer of customs at Setubal and collector of the fishery dues, presented me with four specimens taken together by the padrone Domingo Correia, the same who brought to M. Garnitto the first specimen of which he made me a present, in 1863. It is one of these four specimens that is now in the British Museum. I profited by my short residence in Setubal to inquire whether there were other specimens of *Hyalonema* in the possession of any inhabitant of that town, and I had the good fortune to find one in a good state of preservation, belonging to a proprietor of fishing-boats, Antonio Avelino, who generously gave it to me. This individual, which brings up to twelve the number of Hyalonemas observed by me, was fished in April of the present year, by the padrone Manuel de Souza the younger.

After this exposition of the facts, the correctness of which I guarantee, I hope there will no longer be any pretext for doubting the habitat which I have assigned to *Hyalonema lusi-tanicum*.

As to regarding the Hyalonemas as artificial products of the industry of the Japanese, this is an hypothesis so destitute of proof that it seems to me useless to discuss it here. I will only renew the declaration which I have already made to you with regard to the cotton thread which Professor Ehrenberg supposes to exist twisted round the filaments beneath the corium polypigerum. I maintain that this supposed thread does not exist either in the specimen I have presented to the British Museum, or in any of those in the Museum at Lisbon.

I authorize you to make what use you please of this letter, as also of my preceding one.

Accept, &c., J. V. BARBOZA DU BOCAGE.

PROCEEDINGS OF LEARNED SOCIETIES.

ROYAL SOCIETY.

May 2, 1867.-Lieut.-General Sabine, President, in the Chair.

"On the Genera Heterophyllia, Battersbyia, Palæocyclus, and Asterosmilia, and their Position in the Classification of the Sclerodermic Zoantharia." By Dr. P. M. DUNCAN, Sec. G.S.

Although the practical and natural classification of the Madreporaria (Sclerodermic Zoantharia) which has been submitted by MM. Milne-Edwards and Jules Haime is very generally admitted to be the best, still there are great gaps in the succession of the genera, and, moreover, some genera cannot be placed.

The "break" between the Turbinolides and the Astræides is so great as to render the classification rather artificial; but Dr. Duncan's discovery of a genus *Asterosmilia*, comprising several species, unites these great divisions. The new genus has the peculiarities of the *Trochocyathi*, but in addition it is furnished with an endotheca. The species are described.

The genera Heterophyllia, M°Coy, and Battersbyia, Milne-