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XVII.—Description of a new species of Dolphin (Steno) from the upper parts of the River Amazon

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both above and below ; but the whorls, which are three, instead of two and a half, do not increase quite so rapidly in size. Its distinctive feature consists in having three spiral ribs or carinæ of a shining fulvous tint, which contrast strongly with the whitish ground colour of the shell ; one is situated on either side extending from the apex to the orifice, and the third, which is not so distinctly elevated, on the centre of the body.

The entire volutions appear under a good lens strongly wrinkled longitudinally, more especially on the inner sides, and under a still higher power finely striated spirally. The mouth, which is well rounded and does not turn to either side, embraces a considerable portion of the body-whorl. The operculum I have not been able to examine : its diameter hardly equals the twentieth of an inch.

As yet I have only obtained four specimens, but have still some small portion of the sand in which they were found, remaining unexamined.

If the shell as described above is already known, I should feel greatly obliged if any of your scientific correspondents would favour me with the name.

I am borne out in my opinion that it is new to the British fauna by Dr. Battersby of Torquay, who has kindly examined the shell ; should it prove equally new to science, *Skenea tricarinata* would be a very appropriate designation.

It may be interesting to some of your readers to know, that I met with several fine specimens of the rare *Crenella costulata* in rock-pools in Mount's Bay, and also with *Modiola phaseolina* in some abundance in the same locality.

Yours faithfully,

Upton Hall, near Birkenhead,
June 21, 1856.

W. WEBSTER.

EXPLANATION OF PLATE VIII.

Fig. 12. The shell highly magnified. Fig. 13. Natural size.

XVII.—*Description of a New Species of Dolphin* (Steno) *from the upper parts of the River Amazon**. By J. E. GRAY, Ph.D., F.R.S. &c.

MR. H. W. BATES has sent to the British Museum the skulls of two Dolphins which he has procured from the upper parts of the Amazon.

The *first* is named *Bouto* by the natives, and found near Ega. It is evidently the *Delphinus Geoffroyii* of Desmarest,

[* A brief abstract of a notice of two species of Dolphins occurring in the Amazon, by M. Paul Gervais, appeared in the *Annals*, vol. xvii. p. 521.—*Ed. Ann. Nat. Hist.*]

described from a specimen procured by the French from the Lisbon Museum during their occupation of that town, and which the Portuguese most probably received from the Brazils. M. F. Cuvier, in his 'Cetacea,' p. 112, described this species under the name of *Delphinus frontatus*.

M. D'Orbigny discovered the same, or at any rate a nearly allied species, in the River Moxos in Upper Peru or Bolivia, and described and figured it under the name of *Inia Boliviensis*, Voy. Amér. Mérid. t. 22.

The measurements of the Brazilian skull are as follows, in inches and parts of inches :—

	inches.
Length of skull.....	21 $\frac{1}{2}$
— of beak	13
— of teeth-line of upper jaw	12 $\frac{1}{2}$
— of lower jaw	11
— of lower jaw.....	17 $\frac{1}{2}$
— of symphysis of lower jaw	8 $\frac{1}{2}$
Width of skull	10
— in front of orbits at notch	6
— of beak at notch	3

Teeth $\frac{28}{26}$ $\frac{28}{27}$.

It is only the hinder eight or nine teeth which have a distinct internal heel; the succeeding ones gradually assume the usual conical form, but all the teeth are more or less rugulose.

Mr. H. W. Bates observes: "The animal from which the skull was taken is very large, and wholly of a pinkish flesh-colour. I have seen them rear themselves entirely above the surface of the water when the sexes are sporting in shoaly bays. It goes in pairs, rolling together. . . . There are black dolphins of the larger species, but I do not know if a variety or a separate species. They also roll in pairs, and are abundant towards the Delta of the Amazon. I cannot say whether the flesh-coloured species is found in the Delta; one fact only I can mention—I have never seen a black and a pink dolphin together in pairs. They are always both either black or pink."—*Letter, Feb. 17, 1856.*

The *second* species is named *Tucuxi* by the natives. Mr. H. W. Bates has sent the skull of each sex. They are similar, but the skull of the female is considerably smaller than that of the male. These skulls evidently belong to a species of the genus *Steno*, which has not before come under my observation. It may be described in the Catalogues as

Steno Tucuxi. The Tucuxi.

Nose of the skull depressed at the base, convex and attenuated at the tip, rather ($\frac{1}{1\frac{1}{3}}$ th) longer than the length of the head,

nearly three times as long as the width at the notch; frontal triangle elongate, continued considerably in front of the notch-line. Teeth $\frac{30}{30}$, slender, conical. The lower jaw rather slender and slightly bent up at the tips; symphysis rather keeled beneath in front.

Inhabits the upper parts of the Amazon River near Santarem.

The measurements are as follows, in inches and parts of inches :—

	Male.	Female.
Length of skull	13	12
— of beak	7 $\frac{1}{2}$	6 $\frac{1}{2}$
— of tooth-line	6	5 $\frac{3}{4}$
— of lower jaw	10 $\frac{1}{2}$	9 $\frac{1}{2}$
— of symphysis	2	1 $\frac{1}{2}$
Width of skull	6	5 $\frac{1}{2}$
— of beak at notch	2 $\frac{1}{2}$	2 $\frac{1}{2}$
— of forehead over notch	4 $\frac{3}{4}$	4 $\frac{1}{4}$

Mr. H. W. Bates, in his letter of the same date, observes :—
 “The *Tucuxi*, pronounced *Tucoshee*, is of a darkish black or fuscous colour. It does not roll over like the *Bouto*, but comes slowly to the surface to breathe.”

BIBLIOGRAPHICAL NOTICES.

Manual of Geology, Practical and Theoretical. By JOHN PHILLIPS, M.A., F.R.S. &c. Griffin and Co., London and Glasgow, 1855.

THE foundation of this work was laid twenty-five years ago,—in the ‘Encyclopædia Metropolitana,’—and, without changing its general character, it has been enlarged and improved by the materials collected by the author and numerous fellow-labourers in the same field during the interval. Among the most important geological researches of late years has been the examination of the older rocks of Wales and the Border Counties, and the newer and not less interesting deposits of the tertiary series of Eastern England and the adjoining Continent. The author has devoted considerable space to these subjects; and, by a careful condensation of the evidence brought forward by the multitude of observers conscientiously enumerated in his preface, has given us a lucid and valuable *résumé* of *palæozoic* and *cainozoic* facts, which, together with the revised chapters on mesozoic history, form a really useful Manual of physical and topographical geology. Unlike many elementary works, this is far from being a compilation; for the author, without neglecting the observations of others, has observed for himself, and brings us his own enlarged and practical experience,—the fruit of years of scientific labour, both under official engagements and as separate undertakings. The man who has worked for himself in the field can best recognize the educational wants of others, and thus offer them the necessary elementary knowledge by which the inquiring mind may be led in the right direction to comprehend the philosophy of the closet and the facts of