

long as the nasal. The single præocular reaches to the upper surface of the head, and is in contact with the vertical. Three postoculars. Eight upper labials, the fourth and fifth entering the orbit. Temporals 1 + 2 + 3, but rather irregularly arranged. A groove (of black colour) between the temporals and labials. Ventrals 187; subcaudals 135. Brownish, some of the dorsal scales with a blackish edge; tail with a black line on each side, along the outer margin of the subcaudals; sometimes another pair of less distinct blackish lines along the back of the tail. Brownish yellow below, with or without irregular powdered spots.

Total length 33 inches, of which the tail takes 13 inches.
Southern parts of Madagascar.

XLIV.—*Reply to Professor Verrill's "Remarks on certain Errors in Mr. Jeffreys's Article on the Mollusca of Europe compared with those of Eastern North America."* By J. GWYN JEFFREYS, F.R.S.

I HAVE been hitherto prevented by various engagements from noticing Prof. Verrill's remarks on the above article, which was published in the 'Annals' of last October.

Although I would rather invite than deprecate a fair criticism of this or any other publication of mine, I cannot help regretting that the present critic has not adopted the same style of courtesy which so agreeably characterizes his scientific countrymen.

I do not admit the wholesale charge of "errors" and "mistakes" which is so freely made in his "Remarks," nor that it was incumbent on him personally to disclaim my views. Let them be examined by some competent authority.

The errors attributed to me are those which relate to geographical and local distribution, to the difference of certain species, and to the nomenclature of two other species.

The question of geographical distribution, involving that of migration, is a subject which cannot be hastily disposed of; but Prof. Verrill's idea that the land and freshwater shells which are common to the Old and New Continents may have originated in America and thence crossed to Europe "in the direction of the prevailing currents and winds" is more ingenious than probable. Currents and winds are not the kind of agency we should expect for the migration of such animals. However, I will not offend his national susceptibilities any further.

With regard to local distribution I can only repeat that I

consulted the recent edition of Gould's 'Invertebrata of Massachusetts,' and found it a most useful guide. If Prof. Verrill is dissatisfied with that work, he may directly criticise it to his heart's content; but he ought not to indirectly criticise it through me.

As to the difference of certain species (9 only out of 401 species) I would observe as follows:—

1. *Gemma gemma*. I am by no means sure that this is not the fry of *Venus mercenaria*, although Prof. Verrill has far greater opportunities than I have for deciding the matter.

2. *Arca transversa*. This may be distinct from *A. pexata*, and not merely a variety of it; but Prof. Verrill is evidently fond of adopting genera founded on unimportant characters, and his proneness to multiply species also may therefore be assumed as probable.

3. *Macra ovalis*. I cede the point to Prof. Verrill as to this being distinct from *M. solidissima*. I had not seen specimens of *M. ovalis* and the preceding two controverted species, and only formed my opinion from Gould's work.

4. *Astarte castanea*. *A. borealis* and other species of the same genus are so polymorphous that I was justified in saying *A. castanea* is "perhaps a variety of *A. borealis*." I fully expect to see a connecting link between them. The same observation will apply to *A. quadrans*.

5. *Pecten fuscus*. Prof. Verrill may be right in stating that this is the young of *P. tenuicostatus* and not of *P. irradians*. I judged otherwise from the description of the first-named species in Gould's work.

6. *Dentalium dentale*, Gould. I admit that this may be specifically, but not generically, distinct from *D. striolatum*.

7. *Dentalium striolatum*. Having examined and carefully compared numerous specimens of this shell and *D. abyssorum*, I have no hesitation in considering them the same species. All have a terminal pipe (as in *D. dentalis*), which is partly slit (as in *D. entalis*), so as to connect *Dentalium* with the so-called genus *Entalis*.

8. *Crepidula plana*. If Prof. Verrill has found this species on the outside of other univalve shells or other substances in company with typical specimens of *C. fornicata*, and there is no intermediate form, I agree that they may be different species.

9. *Margarita acuminata*. Probably distinct from *M. varicosa*.

As to the alleged errors of nomenclature, my answer is this:—

Æolis salmonacea and *Æ. gymnota*. Couthouy certainly described both before Dekay; and the names of the former must therefore stand for these species.

Lacuna divaricata. The mistake made by Fabricius in supposing this was Linné's species does not invalidate his claim to the authorship of the specific name, inasmuch as it belongs to a different genus. The specific name has been adopted by Möller, Lovén, Sars, the Messrs. Adams, Petit, and nearly every other writer on North-European shells.

Natica affinis of Gmelin is unquestionably the *N. clausa* of Sowerby. It was originally figured and noticed by Olafsen and Povelsen in their 'Reise igiennem Island' (1772), vol. i. t. x. and vol. ii. pp. 665 and 1016. It was afterwards (1776) described by O. F. Müller in his Prodrömus to the 'Zoologia Danica,' p. 245. no. 2956, citing Olafsen and Povelsen's work, but without a specific name. That name (*affinis*) was given by Gmelin in his edition of the 'Systema Naturæ' (1788), p. 3675, with a reference to Müller as above and the following habitat, "in Oceano septentrionali." Prof. Verrill has mistaken for this species the *Nerita australis* of Gmelin, which is described as having a silverish mouth or aperture and inhabiting New Zealand. He might have spared his note of admiration.

In conclusion I acknowledge my obligation to Prof. Verrill for pointing out the mistakes, although so very few, which I made. I conscientiously did my best with the materials at my command, and I am satisfied if I have done something towards correlating the European with the North-American Mollusca.

BIBLIOGRAPHICAL NOTICES.

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London: Van Voorst, 1872.

THE pursuit of Natural History has, we rejoice to say, become exceedingly popular of late years; and perhaps nothing has tended to diffuse this taste more generally than the publication of local Faunas. Not very long ago the immortal chronicler of Selborne, whom every field-naturalist still regards as his patron saint, stood nearly alone in this department; and his faithful though simple records, limited almost to a single parish, have possessed a charm for succeeding generations, and roused a kindred feeling among out-of-door observers, who naturally take a deeper interest in things they see around them than in those they merely read of. If "the schoolmaster has been abroad," so has the botanist, the geologist, the entomologist, and last, though not least, the ornithologist. So preeminent, indeed, are the attractions of this charming study, that its votaries are probably



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