

sentations, not of myself alone, but of Nagel and of the present state of color-investigation, should appear in a communication devoted to exposing the scientific mistakes of the popular magazines.

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#### SPECIAL ARTICLES

##### DIEMICTYLUS OR NOTOPHTHALMUS AS NAMES OF A SALAMANDER

THE very important work of Dr. Leonhard Stejneger on the "Herpetology of Japan and adjacent territory" has just been published, and among the many interesting points raised (and mostly satisfactorily settled) is one respecting a genus represented by very common American salamanders. The genus variously called *Diemictylus*, or *Notophthalmus*, being represented by a couple of Japanese species, is adopted with the first name. It is said, "Derivation and meaning obscure. Two derivations suggest themselves, namely, *διαμυκτος*, from *διαμυγνυμι*, or *δι-ήμικτολοσ*, but the application of neither is obvious." The deduction is undoubtedly correct and my familiarity with names coined by Rafinesque and his methods in doing so enable me to give an explanation.

Rafinesque (1820), in his *Annals of Nature* (p. 5), claims that his *Triturus viridescens*, type of *Diemictylus*, has "the posterior [feet] with only three toes and two lateral knobs." The name evidently is intended to allude to this character and is badly condensed from *δεις*, twice, *i. e.*, two, *ήμι-*, half, and *δακτυλος*, finger, the "two lateral knobs" being considered as half-toes. An analogous contraction is Rafinesque's *Decactylus*, curtailed from *δεκα*, ten, and *δακτυλος*, finger.

Dr. Stejneger has not given any reason for his preference of *Diemictylus* over *Notophthalmus*, but he may have some unknown to me. I have, however, always regarded *Notophthalmus* as the proper name. Rafinesque named both in the same article and on the same page (5), *Diemictylus* on line eight and *Notophthalmus* on line twenty-six. The characters assigned to both are worthless. It was

open to any later naturalist to adopt either name. S. F. Baird, in 1850, in the *Journal of the Academy of Natural Sciences of Philadelphia* (N. S., I., 281, 284), recognized that both *Diemictylus* and *Notophthalmus* were based on the same form and preferred the latter name. This, so far as I know, was the first use by an original investigator of either.

Edw. Hallowell, in 1858, in the same journal (N. S., III., 362), substituted *Diemyctylus* (changed from *Diemictylus*) for Baird's *Notophthalmus*. In this course, he was followed by Cope and other American zoologists. J. E. Gray, however, followed Baird in accepting *Notophthalmus*.

Cope (1859) preferred "*Diemyctylus*, though unmeaning, to the egregiously inappropriate *Notophthalmus* of the same date." On the contrary, I consider that *Notophthalmus* is very appropriate for the type species which is distinguished by the ocelliform dorsal spots, figuratively known as eyes, in accordance with many similar cases.<sup>1</sup> It is also well formed and euphonious. Perhaps Baird was influenced in accepting the name for these reasons as well as because the character connected with it ("toes of the fore feet free and unequal") was less inappropriate than that associated with *Diemictylus* ("fore feet semipalmate with four equal toes"). However this may be, *Notophthalmus* should be retained unless Dr. Stejneger knows of an earlier use of *Diemictylus*. We are both obedient to the same rule which provides for such cases, and which has guided him in the same work, a few pages farther on (p. 25) in accepting *Hynobius* rather than *Pseudosalamandra*. We have cause to be thankful for being freed from such a barbarous compound as *Diemictylus*.

Naturalists are to be congratulated because Dr. Stejneger has very satisfactorily accounted for the etymology of *Ambystoma* (p. 24). He has also accepted "the shorter form" for the names of families based on components ending in *stoma*, as "Ambystomidae for Amblystomatidae." I have always preferred this course.

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<sup>1</sup> *E. g.*, eyes of the peacock's tail.