

11. Description of *Emys flavipes*.

By Dr. J. E. GRAY, F.R.S. &c.

(Plate L.)

The Zoological Society have lately received, as a present from the Rev. Basil Wilberforce, a series of four specimens of a freshwater Tortoise, which have been for several years in his possession. They belong to a most distinct species, and one which has never before come under my observation and is easily known by its beautiful lined head and neck, the presence of a spot behind the eye, and a distinct ring round the tympanum, the bright orange-colour on the underside of the fore legs, and the narrow orange streak on the suture between the end of the abdominal and the marginal plates, and the blackness of the underside of the margin and the sternum. I propose to call it

EMYS FLAVIPES. (Plate L.)

The crown olive, sides of the face greenish, with a narrow streak from the nostril through the eye extending on the side of the back of the neck. Another streak from the lower side of the eyes to the angle of the mouth, a short streak from the sides of the beak. The under beak with a forked streak on each side, a broader transverse band behind it; one long oval spot on the hinder part of the side of the jaw. A line on each side of the temple, an oval spot behind each eye, and a ring round the ear, extending behind into a longitudinal streak. Pupil round, with a square spot on each side, forming a band obliquely across the eye; neck olive with obscure reddish spots; sides of the neck and throat with orange streaks. Legs black, varied with orange; the lower side of the fore legs orange; the tail tapering, with orange lines. Thorax oblong, bluntly keeled; the keel narrower and more prominent behind. Above pale olive-brown, slightly waved with reddish on the middle of the shield, more marked where it makes a distinct square spot in the middle of the first vertebral shield; the lateral margin slightly revolute and the hinder edge entire; the underside of the marginal shields and the sternum black, with more or less white on the lateral margin of the latter; the suture between the abdominal and the marginal plates marked by a distinct narrow orange streak.

The different specimens vary in the quantity of white on the sternum; in one the sternum is nearly white, clouded with black.

In the British Museum there is a specimen of a young Terrapin brought by Mr. Fraser from North Africa, which is very similar to the above, and has the same black underside of the margin; but its neck has many much narrower streaks, and there is no spot behind the eye or rings round the ear. This specimen appears to indicate the existence of another species, which may be called *Emys fraseri*.

In the same collection there is a young specimen of Terrapin in spirit that was brought home in the Euphrates expedition, which is somewhat like the above, but there are indications of dark rings on the discal plates. The sternum is black, edged with white; the whole of

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the sternum, costal process, and the underside of the marginal shield is white, there being two small round black spots on the underside of each of the five front marginal shields. The head and neck are beautifully marked with very regular pale streaks, but there is no spot behind the eye, and no ring round the margin of the ear. This indicates the existence of a very distinct species; and Dr. Günther thinks that it is the young state of the *Emys grayii*, which he has lately described (see *anteà*, p. 504) from the adult shell, without the animal.

The *Mauremys fuliginosa* (*anteà*, p. 500) has the markings on the head and neck somewhat similar to those of *Emys flavipes*, but sufficiently distinct to define this species, which is also at once known by the depressed and nearly uniform black shields of the shell.

12. On the Classification of the *Helicterineæ*.

By HARPER PEASE, C.M.Z.S.

From a history of the genus *Helicter* which I published in this Society's 'Proceedings' (1862, p. 3) it appears that it was first named and described by Férussac in 1821*, and that this term consequently takes precedence of *Achatinella* (Swains.), 1828†.

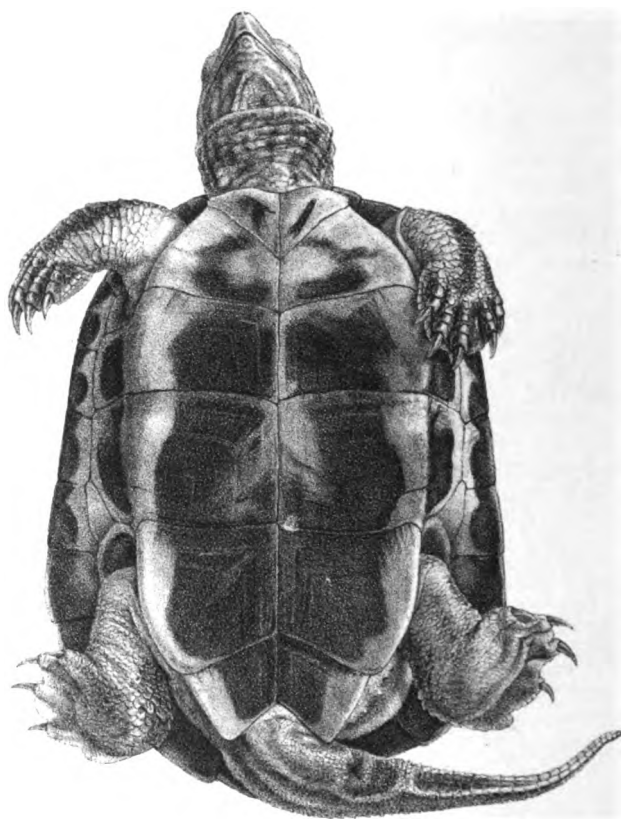
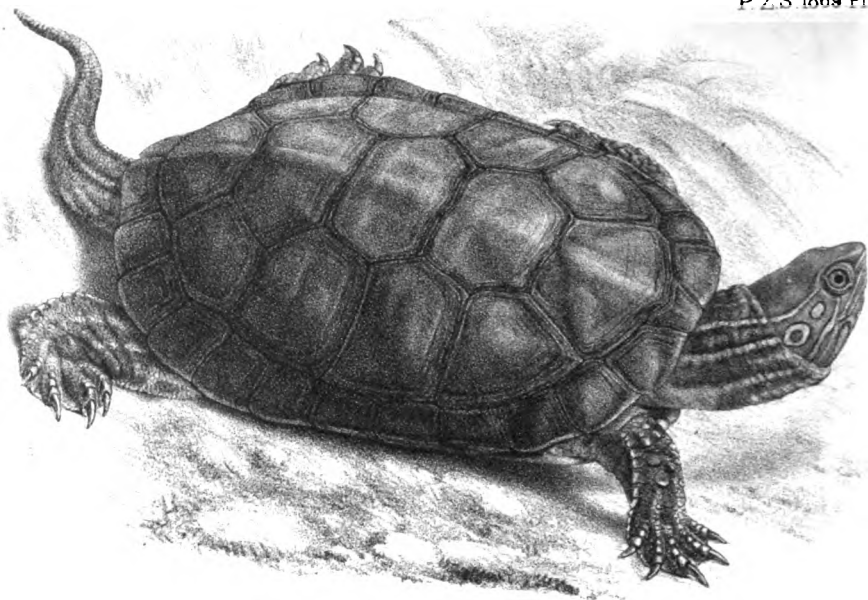
I now propose to elevate it to the rank of a subfamily, and to distinguish the several groups of species which it comprises by generic names. They are as distinct, as strictly definable, and vary even more widely than those of any other subfamily of land shells. From the difference in their habits and stations, we may also expect to find the animals to vary correspondingly when examined.

Had the several species been received in Europe at different times without their locality being known, they would have been distributed over five or six old established genera. They are, in fact, a natural subfamily, confined to the Hawaiian Islands, representing within themselves, by the forms of their shells, several genera inhabiting distant localities, in a similar manner to several other genera inhabiting Polynesia, such as *Pitys*, species of which have been classed by authors with the European genus *Patula*; although the animals of the two are widely distinct. I will not notice at present the several attempts made of late years to dismember the *Helicterineæ* and unite several species to foreign genera, such as *Balea* and others, as I am convinced that the "Testaceous classification" adopted by those authors will be abandoned so soon as the result of the researches of persons now permanently located at many localities in the tropics and elsewhere, formerly but rarely visited and hastily explored, are made known.

As to the distribution of genera and species over the several islands of the group, I remark generally that, with the exception of the genus *Leptachatina* (the species of which are small and of simple

* Tableau Syst. des An. Mollusques, 1821, p. 56; Voy. par M. de Freycinet, 1824, p. 475.

† Quarterly Journal of the Royal Institution, 1828, p. 81.



G H Ford

Emys flavipes

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