into the white sides of the neck. A straight black line extends in front of the eyes across the space which separates them, and forms a triangle with two similar lines extending from each eye to the tip of the proboscis. The largest specimen I have seen, measured twelve inches from end to end of the carapace, and nine and a half across the middle. All the specimens I have examined thus far were obtained in Texas. Rev. Edward Fontaine, of Austin, Texas, writes me that it delights in clear, bold, and rocky streams, and possesses nothing of the sluggishness of other Testudinata, but is brisk and vivacious in all its movements, running rapidly on land when dropped from the hook of the angler, and swimming with great velocity.

I expect to be gravely criticized for describing the species of our Trionychidæ in the manner in which it has been done in the preceding pages. Seeming discrepancies may, indeed, be noticed between the generic and specific characters of these Turtles as expressed here, and the description of the family characters as presented in a former section. But Animal Morphology has still more striking contradictions in store in its nomenclature, than those of which I may have been thus far guilty. So long as our language has not yielded to the necessities of the case, there will be something awkward in the use of expressions that are familiarly employed to designate definite forms, when transferred, with qualifications, to animal forms, which have neither the definiteness nor the regularity of mathematical figures. It may appear absurd to speak of a flattened sphere, of an elongated circle, (not an ellipse,) and the like; but I hold that it is better to make such a use of these words than to avoid apparent contradictions by the introduction of circumlocutions; for such expressions are at once characteristic, and may become quite picturesque when judiciously applied. The family of Naiades among Acephala has afforded me a welcome opportunity to test the importance of form, as the leading character of families. There is scarcely another natural group which embraces species apparently more diversified in their forms than these shells. We need only compare Unio stegarius with U. rectus or Shepardianus, or U. alatus with U. cylindricus, or with U. Cardium or U. torsus or U. mytiloides, triqueter, flexuosus, etc. Every possible form seems to be represented in that family, from the quadrangular or triangular to the spherical. And yet all Naiades have one and the same typical form, determined by their internal structure, which may be described as ovate, with a double flexure on the lower side, towards the hind extremity; and this form is determined by the structure of the mantle.[1] Unio flexuosus exhibits this typical form in its most distinct out-

[1] I shall have an opportunity to illustrate these statements most fully in a future volume, probably the fifth, which is to be devoted exclusively to the history of our fresh-water Mussels.