APPENDIX AND ERRATA.

While the first volume was passing through the press, Dr. John E. Gray published a highly valuable and very important contribution to the Natural History of the Testudinata, under the title of "Catalogue of Shield Reptiles in the Collection of the British Museum," a copy of which I have lately received through the kindness of the author. This work is accompanied with a large number of remarkably well executed plates. A few additional remarks upon the North American species are rendered necessary by its appearance.

Dr. Gray supposes that the hind lobe of the sternum may be movable in the females of all the species of genuine Testudo; and on that account he objects to the genus Chersus of Wagler. In the species of our Southern States, this is certainly not the case. I have seen several specimens lay eggs in my garden, the sternum of which was as immovable as that of the males.

Dr. Gray still unites the Chelydroide and Cinosternoide with the Emydoide. I hold this to be an oversight of their true relations.

Under the generic name of Geoclemys, Gray unites three of our North American species, — which I have referred to the genera Glyptemys, Calemys, — and Nanemys, with three Asiatic species, which certainly are not very closely allied to them, if I may judge by his figure of Geoclemys Reevesii. These Asiatic species seem rather to belong to the genus Graptemys.

Contrary to the law of priority, Dr. Gray does not retain the name of Emys for the European Testudo lutaria, but applies it nearly in the same way as Duméril and Bibron. Among his North American Emys, there are several which are only nominal species. I trust that the evidence I have adduced in the case of Ptychemys rugosa is sufficient to show, that, in some types, the color does not afford specific characters. This is the case, to the same extent, with Ptychemys concinna, which is mentioned under four different names by Dr. Gray, — as Emys ornata, E. floridana, E. annulifera, and Pseudemys concinna. Ptychemys mobiliensis appears twice, — as Emys mobiliensis and as E. ventricosa. Ptychemys rugosa also appears twice, — as Emys rivulata and Pseudemys serrata. These facts are sufficient to show that Gray's genus Pseudemys is not well founded, as the two species which he himself had an opportunity of examining are only varieties of other species which he refers to the old genus Emys. I am unable to refer his Emys venusta with certainty, as his figure, though very well drawn, does not exhibit the generic characters. I believe it, however, to be one of the many varieties of Ptychemys concinna. The same remark applies to Emys callirostris. As stated p. 435, Emys Holbrookii Gray is Emys elegans Neu-IVied, a western species, which Gray was unable to refer. It belongs to the genus Trachemys.

Among the species requiring further examination, Gray mentions Emys reticularia or reticulata. As I have stated p. 441, this is a very distinct species, the type of a distinct genus, which I have named Deirochelys. Emys mobilionsis is also a distinct species, belonging to the genus Ptychemys; and so in Emys labyrinthica, Emys Troostii comes nearest to Emys scabra, the Emys serrata of the North American Herpetology, but it is quite distinct, and belongs, with the latter, to the genus Trachemys.

I do not know Gray's Emys olivacea, and doubt its being a North American species. I have, at least, never seen a Turtle like that in the United States.