

Nor was Goldsmith, who wrote more than a century later, much more fortunate in dealing with the animal kingdom. Buffon had already published his great work ; and even he could bethink him of no better mode of dividing his animals than into wild and tame. And in Goldsmith, who adopted, in treating of the mammals, a similar principle, we find the fishes and molluscs placed in advance of the sauroid, ophidian, and batrachian reptiles,—the whale united in close relationship to the sharks and rays,—animals of the tortoise kind classed among animals of the lobster kind, and both among shell-fish, such as the snail, the nautilus, and the oyster. And yet Goldsmith was engaged on his work little more than eighty years ago. In fine, the true principles of classification in the animal kingdom are of well nigh as recent development as geologic science itself, and not greatly more ancient in even the *vegetable* kingdom. It would, of course, be wholly out of place to attempt giving a minute history here of the progress of arrangement in either department ; but it can scarce be held that the natural system of plants was other than very incomplete previous to 1789, when Jussieu first enunciated his scheme of classification ; nor did it receive its later improvements until so late as 1846, when, after the publication in succession of the schemes of De Candolle and Endlicher, Lindley communicated his finished system to the world. And there certainly existed no even tolerably perfect system of zoology until 1816, when the “Animal Kingdom” of Cuvier appeared. Later naturalists, such as Agassiz in his own special department, the history of fishes, and Professor Owen in the invertebrate divisions, have improved on the classification of even the great Frenchman ; but for purposes of comparison between the scheme developed in geologic history and that at length elaborated by the human mind, the system of Cuvier will be found, for at least our present purpose, suffi-