

were to the naturalist what the mariner's compass was to the navigator. It came to the aid of the comparative anatomist, when his need was the sorest and as a most potent factor in the development of the science of histology. By the use of this instrument cell-structure and the great cell theory, as propounded and advanced by Schwann and Darwin, became comprehensible.

Buffon's *Natural History* claims the merit of having been the first work to collect the isolated and apparently disconnected facts of this study and present them in a popular and generally intelligible form.

An important revolution in *Natural History* took place from the institution of Botanic gardens, from the results of the extension of geographical knowledge, from the various scientific expeditions which were sent over the globe under such scientific spirits as Humboldt, Hooker and Darwin. A botanic garden of the Royal Dublin Society at Glasnevin was opened in 1796. Glasgow had one in 1818, and the Park and Garden at Kew were instituted in 1730. At the end of the 18th century, 1,600 botanic gardens were to be found in Europe. The most important researches in physiological botany had been made by French and German scientists, as their schools afforded facilities not found to the same extent in Great Britain.

The great Linnaeus taught zoology and botany as branches of knowledge to be studied for their own intrinsic interest. He is known to have been a judicious reformer rather than a discoverer. His influence imbued his students with ardor and enthusiasm, and they went forth to all parts of the world to try to contribute to the richness of their loved master's lore and to extend his knowledge.

Linnaeus was the first to attempt the classification of animals according to certain structural characters, and although this proved very defective, it led to much criticism, and stimulated naturalists to comprehend the important principle that internal structure, not external appearance, must determine the limits of groups or classes. The great principle of classification as now generally accepted, was first originated by the genius of the great Frenchman, Baron Cuvier (1769-1832), who made a notable advance on his predecessors, and the world owes to him the first systematic application of comparative anatomy to the study of