

ing to, for they are features of embryonic progress, and embryonic progress is the grand key to the theory of development.”

Such is the ingenious piece of special pleading which this most popular of the Lamarckians directs against the standing and organization of the earlier fishes. Let us examine it somewhat in detail, and see whether the slight admixture of truth which it contains serves to do aught more than to render current, like the gilding of a counterfeit guinea spread over the base metal, the amount of error which lies beneath. I know not a better example than that which it furnishes, of the entanglement and perplexity which the meshes of an artificial classification, when converted, in argumentative processes, into symbols and abstractions, are sure to involve subjects simple enough in themselves.

Fishes, according to the classification of a preponderating majority of the ichthyologists that have flourished from the earliest times down to those of Agassiz, have been divided into two great series, the *Ordinary* or osseous, and the *Chondropterygii* or cartilaginous. And these two divisions of the class, instead of being ranged consecutively in a continuous line, the one in advance of the other, have been ranged in two parallel lines, the one directly abreast of the other. There is this further peculiarity in the arrangement, that the line of the cartilaginous series, from the circumstance that some of its families rise higher and some sink lower in the scale than any of the ordinary fishes, outflanks the array of the osseous series at both ends. The front which it presents contains fewer genera and species than that of the osseous division; but, like the front of an army drawn out in single file, it extends along a greater length of ground. And to this long-fronted series of the cartilaginous, or, ac