other in time. In our day, Darwin has given to such speculations a form and coherency which they did not before possess, by his doctrine of Natural Selection; and theories of derivation and transformation are perhaps more popular than at any previous time, and are impressing themselves legibly on the practical every day work of science. In these circumstances it becomes necessary to watch the phases of opinion on this subject, to examine the various doctrines propounded, and to ascertain what progress they are making, if any, toward the goal of truth.

A very important contribution to this work has recently been made by Professor Owen in the concluding chapter of his great book on Physiology, just completed;. and I shall take this as the basis of some remarks on the present state of the question of derivation.

Prof. Owen, availing himself of the privileges of a father in Science, goes back to 1830 in reviewing the history of doctrines of derivation, and shows that in his student days the question of the origin of species was agitated by the great Cuvier and his contemporary, Geoffroy St. Hilaire, and that both of these great masters of Natural Science had doubts as to the permanency of species in geological time, though neither had before him enough of biological evidence to establish this as a fact, or to frame any certain theory as to the relation of modern to extinct species; and Cuvier, at least, saw evidence against derivation in the apparent want of connecting links between fossil and recent species. Owen endeavours to arrange the questions raised in 1830 under several heads, and to state each as then agitated, and to "post it up," so to speak, to the present period—his evident intention being to show that the views of Darwin and other recent advocates of theories of derivation are by no means so original as they are supposed to be.

The first great question agitated by the French naturalists forty years ago is that grand one—Is there unity of plan or final purpose in living creatures? Are the homologies or resemblances of structure in organized beings merely parts of the general plan, or do they point to genetic or other relations of derivation? Are the beautiful adaptations of organs to functions, and of organisms to places in nature, evidences of deliberate purpose working out its ends by means, or have the external necessities given form to the organs? On this question Cuvier, in his assertion of teleology, evidently took the broader and more