

LIFE OF JAMES DWIGHT DANA

theory, I think I should take the ground that there were certain original points of divergence from time to time introduced into the system, as indicated by the comprehensive types.

“ 3. The fact that with the transitions in the strata and formations, the exterminations of species often cut the threads of genera, families, and tribes,—and sometimes, also, of the higher groups of orders, classes, and even subkingdoms; and yet the threads have been started again in new species. The transition, after the carboniferous age was one apparently of complete extermination both in America and Europe, when all threads were cut; and yet life was reinstated, and partly by renewing with species old genera in all the classes and subkingdoms, besides adding new types.

“ You thus see that I have not spoken positively on page 602 without thinking I had some foundation for it. I speak merely of the geological facts that bear on the (or any) theory of development, not of facts from other sources.

“ You say in your letter that according to Mr. Falconer, Professor Owen has not done his work well with the reptilian bird. I should be very glad to know what are Mr. Falconer's views. I should like also to have his present opinions with respect to the mesozoic mammals of England, or, at least, to be informed whether he sustains the conclusions he first published on the subject. I have quoted from Owen in my book because his publications were more recent, not that I have greater confidence in his opinions or knowledge.”

DARWIN TO DANA

“ DOWN, BROMLEY, KENT, February 20 [1863].

“ I received a few days ago your book, and this morning your pamphlet on *Man* and your kind letter. I am heartily sorry that your head is not yet strong, and whatever you do, do not again overwork yourself. Your book [*Manual of Geology*] is a monument of labor, though I have as yet only just turned over the pages. It evidently contains a mass of valuable matter.

“ With respect to the change of species, I fully admit your objections are perfectly valid. I have noticed them,