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1859

My dear Sir:

I thank you much for your pamphlet on "Modern Ideas of Deviation". Your arguments with regard to Darwin and Owen are excellent. I only question whether you have not given too much weight to the observations of Prof. Marsh, as the Siredon requires but a few days of warmer temperature to turn it into the new form — that of Amblystoma — it has nothing of the permanence of ~~the~~ a species. Its machinery needs a detent which cold weather has not been able to insert. Such a temporary suspension of development is not the making of one

species from another, much less of one genus from another. Moreover, it has always been believed by advocates of the development theory that the amphibians with permanent gills were, historically or genetically, intermediate forms between fishes and reptiles; but by proving them only temporary states the links <sup>to be</sup> in the chain are shown, by such investigations as those of Prof. Marsh, to be wanting.

It is to be noted also that these intermediate forms are due to cold weather, and <sup>are produced</sup> by the degradation of a higher type, and hence afford no reason for the belief that they could have come from fishes, in a boonian climate.

In your pamphlet you appear to appreciate a part of what is here stated, but I think that if you had



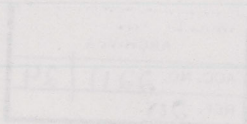
had all these considerations  
in view, you would not have  
regarded Marsh's facts as appli-  
cable to the case in hand.

With the warmest esteem

Very truly yours

James D. Dana

for Dawson.



*J. J. Davis*  
*My 1899*

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