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*The Tendency of Species to form Varieties.*—Of the papers upon this subject which have appeared in the 'Zoologist' (Zool. 6293—6308), those of Mr. Darwin seem to extend the operation of his theory into a period resembling geological epochs, which carries us at once into the region of conjecture,—a "barren ground," upon the boundless wastes of which I have no inclination to wander. If, however, Mr. Darwin's hypothesis supposes perceptible changes, and embraces the time present, it is submitted that the following observations may be not unworthy of attention in reference to his reasoning, and I would suggest for consideration whether the views (concluding the meaning of both writers to be essentially the same) propounded in the papers alluded to above are not founded upon the imaginary probable, rather than obtained by induction from ascertained facts, which last process I do not hesitate to pronounce the only solid and satisfactory basis of a new opinion. As (the italics are his own) Mr. Wallace writes (Zool. 6305), of "*progression and continual divergence*, deduced from the general laws which regulate the existence of animals in a state of nature," he argues (if I understand him correctly) that the production of varieties is of constant occurrence; and, according to his position (Zool. 6304), that "the *variety* would

replace the *species*," the several races of animals familiarly known to us now must differ materially from those with which mankind were originally acquainted. But is this the fact? Comparing the oldest extant descriptions with any existing organisms (inanimate as well as animate may be included) which we can identify, is there any appreciable difference between the forms now before us and what are represented to us as the earlier types? I fancy I can anticipate the reply. Again; Mr. Wallace speaks (Zool. 6305) of "the undisputed fact that varieties do frequently occur." No doubt "freaks of nature" do occasionally happen in respect to individual wild animals, but how far they are perpetuated is very questionable. If Mr. Wallace's theory is sound, we ought to find in some part or other of this country colonies of white rooks, white blackbirds, &c.; whereas we may challenge the reference to any example of such departures from the normal configuration becoming permanent. Mr. Wallace appears (Zool. 6304) to regard a casual instance of improved physical powers as the regular variation from the original type of an animal; on the contrary, I conceive the rule to be that the variation usually consists in a deficiency of those powers. I by no means deny that among a'l races of organized beings some individuals may and do possess a superiority in development over their congeners in general, but I do contend that in a state of nature this superiority is not demonstrably continued in successive generations; indeed I will declare my opinion, that, in the wild state, after a very few generations at the utmost, any accidental variation, whether apparently favourable or unfavourable, will be merged in a return to that original condition in which the creature was from the first adapted to the situation in which it was placed. Analogously we may reason from the case of mankind: our own experience must inform us, that monstrosities are not of very rare occurrence in the world, but it will not be argued that these examples have possessed any general influence upon the average standard dimensions of the human race. Reversely I believe it has been expressly noted, that the progeny, if any, of either giants or dwarfs did not prominently exhibit the peculiarities of the parents. I am not aware that the King of Prussia, who showed such a mania for collecting tall men for enlisting in his guards, succeeded in establishing a breed of giants in his dominions, although it is, I think, recorded that Frederick was by no means scrupulous as to his measures for providing his extra-grenadiers with proportionally tall wives.—*Arthur Hussey; Rottingdean, February, 1859.*

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