

Crusoe. We see five fingers and toes, and ask how this numerical arrangement started at once from fin rays of fishes all over the world ; and how it has continued unchanged till now, when it forms the basis of our decimal arithmetic.

Again, our reptiles of the coal do not constitute a continuous series, and belong to a great number of distinct genera and families, nor is it possible that they can all, except at widely different times, have originated from the same source. It either happened, for some unknown reason, that many kinds of fishes put on the reptilian guise in the same period, or else the vast lapse of ages required for the production of a reptile from a fish must be indefinitely increased for the production of many dissimilar reptiles from each other ; or, on the other hand, we must suppose that the limit between the fish and reptile being once overpassed, a facility for comparatively rapid changes became the property of the latter. Either supposition would, I think, contradict such facts bearing on the subject as are known to us.

We commenced with supposing that the reptiles of the Coal might possibly be the first of their family, but it is evident from the above considerations, that on the doctrine of natural selection, the number and variety of reptiles in this period would imply that their predecessors in this form must have existed from a time as early as any in which even fishes are known to exist ; so that if we adopt any hypothesis of derivation, it would probably be necessary to have recourse to that which supposes at particular periods a sudden and as yet unaccountable transmutation of one form into another ; a view which, in its remoteness from anything included under ordinary natural laws, does not materially differ from that currently received idea of creative intervention, with which, in so far as our coal reptiles can inform us, we are for the present satisfied.

There is one other point which strikes the naturalist in considering these animals, and which has a certain bearing on such