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JOHN MICHELS, Editor.

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PROFESSOR ALEXANDER AGASSIZ's address, delivered in Saunders' Theatre, Cambridge, which we print in full on another page, must be considered one of the most important events of the great Boston meeting.

In his position as Vice-President of the Biological Section nothing could be more appropriate than the expression of his views upon the direction which modern biological research is taking. Animated by his own experience and convictions, his address was a deliberate and able attack upon the prevailing tendency towards too rapid generalization—a tendency which has been increasing during the last fifteen years, and is clearly the outgrowth of the intense desire of modern biologists to break down each and every barrier which obstructs our view in the history of development. Natural and laudable as is the desire to leave no stone unturned in our knowledge of the relationships of the different branches of the animal kingdom, it can only result in the obstruction of future investigators if it is not kept strictly within the limits of the truth. Phylogenetic inquiries add greatly to the zest of study, but should not be carried so far as to hamper or obscure the real end in view, which is, of course, truth and precision of statement, with the line sharply defined between what is actually seen and that which it is inferred ought to be seen.

Prof. Agassiz based his conclusions upon his comprehensive study of the sea-urchin. Stating as a premise the now well-known fact that in their embyological development the modern forms repeat the stages through which their ancestors passed in fossil history, he carefully traced the parallelism in a number of modern and fossil forms, giving an outline of his recent study. The results have been in all cases in positive confirmation of the above premise, and show the very close affiliation of the oldest and most recent forms, in general characters. But while the sea-urchins, with a comparatively small number of existing species, and with a comparatively complete fossil record, offer a tempting field for speculation, Prof. Agassiz denied his right to group the genera into anything like a complete genealogical tree. "If," he concluded, "when we take one of the most limited groups of the animal kingdom, we find ourselves engaged in a hopeless task, what must be the prospect should we attack the problem of other classes or groups of the animal kingdom, where the species run into thousands, while they number only tens in the case we have attempted to carry out? Shall we say 'ignorabimus' or 'impavidi progrediamus,' and valiantly chase a phantom we can never hope to seize?"

It was hardly to be expected that such an attack as this would pass unnoticed, and in fact, one of the features of the meetings of the Biological Section was a debate growing out of it, which took place on the following day. Prof. Cope had been reading an able paper upon the succession of the extinct Felidæ, pointing to the modifications of the teeth as a basis for forming a complete genetic series. At the close of his paper he called Prof. Agassiz's attention to the fact that here, in the cat family, was an instance leading in quite an opposite direction to that which Prof. Agassiz had assumed in his address the day before. An interesting discussion followed. Prof. Agassiz said he did not object to the grouping of genera into lines of descent where the structural characters were sufficiently homologous, but he did object to regarding such affinity as justifying the introduction of hypothetical links into other parts of the chain, and he did not see that the modifications of a single character, the teeth, warranted the phylogenetic conclusions which Prof. Cope had just reached. Prof. Burt Wilder added that, in his own study upon the pectoral muscles of the dog and other animals, he had found the fallacy of hasty generalization for genetic inferences, drawn from the muscles alone, would widely differ from the facts of actual relationship. Prof. Cope replied that in such questions all must admit that different values should be assigned to different parts of the animal frame, and among the hard parts, of course, he ranked, first, the limbs, then, he said, came the teeth. In justification of his arrangement of the extinct cats into two lines of descent from a common ancestor, he said that the complication of the brains confirmed the history told by the teeth. Prof. Agassiz emphatically repeated his statement of the day before and the discussion closed. We hope this address will be widely circulated and read; if received in the spirit in which Prof. Agassiz intended it, its effect will be admirable. The reaction from the theory of special creation is running strongly in every quarter, and in a day when we find ingenious speculations advanced even in small memoirs, every one must admit the necessity of a more conservative spirit. There is no danger of going into the old and opposite extreme, nor does Prof. Agassiz's address encourage the return movement. It is a re-statement of the old piece of advice—do not attempt to run before you are sure you can walk.