

A POSTHUMOUS DARWINIAN ESSAY.

At a largely-attended meeting of the Linnean Society held at Burlington House on Thursday evening, Sir John Lubbeck, Bart., M.P., in the chair,

Mr Romanes, one of the secretaries, read a posthumous paper by the late Charles Darwin. It consisted of the full text of an additional chapter on "Instinct" written by Mr Darwin for his well-known work, "*The Origin of Species*," but afterwards suppressed for the sake of condensation. The paper exhaustively examined the authenticated facts connected with the migration of birds and animals, their instinctive fear, and their nidification and habitation; also the habitations of mammals. It concluded as follows:—

"We have in this chapter chiefly considered the instincts of animals under the point of view whether it is possible that they could have been acquired through the means indicated on our theory of the origin of species, or whether, even if the simpler ones could have been thus acquired, others are so complex and wonderful that they must have been specially endowed, and thus overthrow the theory. Even in the most marvellous instinct known, that of the cells of the hive-bee, we have seen how a simple instinctive action may lead to results which fill the mind with astonishment. Moreover it seems to me that the very general fact of the gradation of complexity of instincts within the same group of animals; and likewise the fact of two allied species, placed in two distinct parts of the world and surrounded by wholly different conditions of life, still having very much in common in their instincts, supports our theory of descent, for they are explained by it; whereas if we look at each instinct as specially endowed, we can only say that it is. The imperfections and mistakes of instinct on our theory cease to be surprising; indeed it would be wonderful that far more numerous and flagrant cases could not be detected, if it were not that a species which has failed to become modified and so far perfected in its instincts that it could continue struggling with the co-inhabitants of the same region, would simply add one more to the myriads which have become extinct. It may not be logical, but to my imagination it is far more satisfactory to look at the young cuckoo ejecting its foster brothers, ants making slaves, the larvae of the ichneumonidae feeding within the live bodies of their prey, cats playing with mice, otters and cormorants with living fish, not as instincts specially given by the Creator, but as very small parts of one general law leading to the advancement of all organic bodies—Multiply, Vary, let the strongest live and the weakest die."

Professor Huxley remarked that it would be presumptuous to comment upon a matured work of their venerated friend without having first had an opportunity of thoroughly examining it, but he could not help thinking that the paper they had just heard was not a matured work of Darwin's (Hear, hear.) He apprehended that it consisted simply of a series of notes made for his own use out of his immense stores of reading and acquired knowledge, and which it was his purpose some day to prepare and bring into harmony with his great scheme as published in the "*Origin of Species*." There was simply a series of statements, many of which were familiar, and many of the cases cited were at present simply puzzling—difficult to reconcile with any pleasant and agreeable view of the creation, or of the results of life, which latter was the phrase he would rather use. The well-known fact mentioned in the paper—*viz.*, the instinct which led the female spider bravely to attack and devour the male after pairing with him—the most remarkable case on record of what might be called a post-nuptial settlement—(great laughter)—that assuredly was not accountable for upon any hypothesis as to the use of the individual in benefiting his species. (Laughter.) Unless the male spiders were in a very undue proportion to the females it could not be an economical process for the bride to eat her husband the morning after the wedding. (Great laughter.) He thought it a pity that in the paper read that night there was not a clearer expression of what no one appreciated more fully than Darwin did, *viz.*, that this world is not constructed upon any plan which, on attentive consideration, produces agreeable feelings in the breast of the philanthropist or philologist. It was a very hard world, full of misery, and struggle, and destruction; and the fact with which the paper wound up—*viz.*, that it was a world in which the weakest went to the wall, in which the wear of life and suffering were absolutely incalculable with the results attained—was one leading large fact of which they had not only no explanation, but which most profoundly influenced their general views of things, and of their relations to the constitution of the universe.

Mr Romanes explained that the MS. was handed to him by Mr Darwin shortly before his death, with permission to publish or suppress any parts he thought desirable.