they are recognized as assumptions; but so long as the very question in debate has reference to their validity as assumptions, it is closely illogical to adduce them as arguments. And this is the only point with which we are at present concerned.

Note B to Page 89.

In answer to this illustration as previously adduced by me, Mr. Poulton has objected that the benefit arising from the peculiar mode of stinging in question is a benefit conferred, not on the insect which stings, but upon its progeny. The point of the illustration however has no reference to the maternal instinct (which here, as elsewhere, I doubt not is due to natural selection); it has reference only to the particular instinct of selective stinging, which here ministers to the purposes of the other and more general instinct of rearing progeny. Given then the maternal instinct of stinging prey for the use of progeny, the question is—What first determined the ancestors of the Sphex to sting their prey only in nine particular points? Darwin's answer to this question is as follows:—

"I have been thinking about Pompilius and its allies. Please take the trouble to read on perforation of the corolla by Bees, p. 425 of my 'Cross-fertilization,' to end of chapter. Bees show so much intelligence in their acts, that it seems not improbable to me that the progenitors of Pompilius originally stung caterpillars and spiders, &c., in any part of their bodies, and then observed by their intelligence that if they stung them in one particular place, as between certain segments on the lower side, their prey was at once paralyzed. It does not seem to me at all incredible that this action should then become instinctive, i.e. memory transmitted from one generation to another. It does not seem necessary to suppose that when Pompilius stung its prey in the ganglion it intended or knew that their prey would keep long alive. The development of the larvae may have been subsequently modified in relation to their half-dead, instead of wholly dead prey; supposing that the prey was at first quite killed, which would have required much stinging. Turn this over in your mind," &c.