not been able to discover that he has recorded any opinion as to what cause—the now-called,—instincts of animals, whether to appetite or intellect, are to be attributed: he says much on the subject of the hive bee, but it is merely a history of its proceedings, unaccompanied by a single syllable from which we might conjecture that he attributed any part of these proceedings, wonderful as he must have thought them, to any faculty distinct from intellect, and what seems more extraordinary, without any expression of admiration at the expertness, and art, and skill, so evident in all that this little creature almost miraculously accomplishes. On another occasion, indeed, he observes, that "Some of the animals that have no blood, have a more intelligent soul than some of those that have blood, as the bee and the ant genus."* A much later Greek writer has asked the question, "'*Who taught the bee, that wise workman, to act the geometer, and to erect her three-storied houses of hexagonal structures?*"† And this is the question I shall now endeavour to answer.

When we consider the infinite variety of instincts, their nice and striking adaptation to the circumstances, wants, and station of the several animals that are endowed with them, of which numerous instances will be given hereafter, we see such evident marks of design, and such varied attention to so many particulars, such a conformity between the organs and instruments of each animal and the work it has to do, that we cannot hesitate a moment to ascribe it to some power who planned the machine with a view to accomplish a certain purpose; and when we further con-

* De Part. Animal. l. ii. c. 4.

† Τις την μελιτταν, την σοφην την εργατιν
Γεωμετρειν επεισε, και τριωροφους
Οικους εγειρειν ἑξαγονων κτισματων.
Pisidius, De Mundi Opificio, quoted by Bochart.