

teemed as usual with the intruders, and I was puzzled in no small degree to account for their re-appearance. Accidentally passing the table, I observed an ant upon the wall, about a foot above the level of the sweets: it fell, and instead of passing between the wall and the table and alighting upon the ground, the insect fell upon the table. Can it be possible, I said to myself, that this fall is designed? I stood to observe with the most intense curiosity: another ant ascended, and dropped with similar success; another and another followed; and there was no longer doubt that instinct (if instinct I must call it) had made them in this instance a match for reason. But what is this "instinct," or "impulse of nature," which enables an animal to do that which, in those things that man can do, results from a chain of reasoning, and in things which men cannot do, is not to be explained by any efforts of the intellectual faculties; by which the captive and expatriated pigeon on its release flies directly and unhesitatingly through the pathless air to its distant home; by which the far-removed dog returns to his master by previously untravelled and unknown routes; by which the bed-bug, it is said, if cut off from access to the bed by the feet or draperies, ascends to the ceiling and falls upon the canopy; and by which the *Formica indefessa* was enabled to defeat all my precautions?

I could multiply instances of similar mysterious power in the animal world from personal observation, but am debarred from indulging in further details by the specific object of this paper and the nature of our Transactions. Let it suffice to remark, that the reflective mind finds new causes of wonder and admiration, and new lessons of humility, in almost every new inquiry into the æconomy, relations, and structure of the animate or inanimate world.

In concluding this paper, I may add, as a suitable accompaniment, two extracts from my Diary respecting the swarming of ants.

"Poona, October 6, 1829.—At ten o'clock in the morning, during a hot sun, but after a continued fall of rain on the preceding night, a nest of white ants in my garden sent forth a winged colony in myriads; the small wingless labouring white ants were busily employed about the orifice whence the swarm issued, apparently superintending the emigration. Scarcely had they appeared, than the domestic poultry were on the alert; Sparrows, Grackles, and Crows collected in numbers, and within a quarter of an hour there were *some scores* of Kites (*Milvus Cheel*) making short circles within a few feet of the ground, and catching the ants as they rose upon the wing. The dexterity with which these large birds avoided coming into contact with each other, in rapid and whirling pursuit of their prey within a very limited space, excited my surprise and admiration."