

punctures with sharp instruments, or other modes of irritation. These notions are of very ancient date, for they may be traced even beyond the time of Aristotle; and they have been handed down by succeeding naturalists, and echoed from the one to the other, so as to have gained admission without being questioned in all the systematic works on Zoology.

The alleged spontaneous palpitation of the flesh, occurring in particular parts, had its origin in the views taken of the nature of sponges, by Marsigli, an Italian naturalist, who, in the year 1771, announced that he had seen movements of dilatation and contraction in the round apertures visible on the surface of sponges. This statement, so confidently advanced, seems to have made a strong impression on Ellis, who, while pursuing a similar train of observations, came to persuade himself that he could see, not only the movements described by Marsigli, but also the passage of water to and fro, through the same apertures. He communicated this account to the Royal Society in 1765: it was published in its Transactions,* and will ever remain an instructive proof of the degree in which our very perceptions may be influenced by preconceived views, and by the force of the imagination. Pallas immediately admitted, without examination, the hasty assertion of Ellis, into his "*Elenchus Zoophytorum*"; whence it was copied by succeeding authors, and the error became at length so widely disseminated, that for more than half a century it was received as an established fact in natural history. The more accurate researches of Dr. Grant on these subjects have at length dispelled the prevailing illusion, and have clearly proved that the sponge does not possess, in any sensible degree, that power of contraction which had, for so many ages, been ascribed to it.†

* Vol. lv. p. 284.

† See his papers on this subject in the Edinburgh Philosophical Journal, vol. xiii. p. 95 and 333, from which most of the facts mentioned in the above account are taken.