

higher principle, of a more peculiarly physiological kind. But it may still be instructive to notice a case in which the principle, which is thus brought into view, is far more completely elevated above the domain of matter and mechanism than in those we have yet considered;—a case where we have not only Irritation, but Sensation;—not only Life, but Consciousness and Will. A part of science in which suggestions present themselves, brings us, in a very striking manner, to the passage from the physical to the hyperphysical sciences.

We have seen already (chap. i.) that Galen and his predecessors had satisfied themselves that the nerves are the channels of perception; a doctrine which had been distinctly taught by Herophilus¹ in the Alexandrian school. Herophilus, however, still combined, under the common name of Nerves, the Tendons; though he distinguished such Nerves from those which arise from the brain and the spinal marrow, and which are subservient to the will. In Galen's time this subject had been prosecuted more into detail. That anatomist has left a Treatise expressly upon *The Anatomy of the Nerves*; in which he describes the successive *Pairs* of Nerves: thus, the First Pair are the visual nerves: and we see, in the language which Galen uses, the evidence of the care and interest with which he had himself examined them. "These nerves," he says, "are not resolved into many fibres, like all the other nerves, when they reach the organs to which they belong; but spread out in a different and very remarkable manner, which it is not easy to describe or to believe, without actually seeing it." He then gives a description of the retina. In like manner he describes the Second Pair, which is distributed to the muscles of the eyes; the Third and Fourth Pairs, which go to the tongue and palate; and so on to the Seventh Pair. This division into Seven Pairs was established by Marinus,² but Vesalius found it to be incomplete. The examination which is the basis of the anatomical enumeration of the Nerves at present recognized was that of Willis. His book, entitled *Cerebri Anatome, cui accessit Nervorum descriptio et usus*, appeared at London in 1664. He made important additions to the knowledge of this subject.³ Thus he is the first who describes in a distinct manner what has been called the *Nervous Centre*,⁴ the pyramidal eminences which, according to more recent anatomists, are the communication of the brain with the spinal marrow: and of which the *Decussation*, described by Santorini, affords the explanation of the action of a part

¹ Spr. i. 534. ² Dic. Sc. Med. xxxv. 467. ³ Cuv. Sc. Nat. p. 385. ⁴ Ibid.