

into final causes be at once abandoned as utterly vain and hopeless. But it surely requires no laboured refutation to overturn a system that violates every analogy by which our reasonings on these subjects must necessarily be guided; and no artificial logic or scholastic jargon will long prevail over the natural sentiment, which must ever guide our conduct, that animals possess powers of feeling, and of spontaneous action, and faculties appertaining to those of intellect.

The functions of sensation, perception, and voluntary motion require the presence of an animal substance, which we find to be organized in a peculiar manner, and endowed with very remarkable properties. It is called the *medullary substance*; and it composes the greater part of the texture of the brain, spinal marrow, and nerves; organs, of which the assemblage is known by the general name of *the nervous system*. Certain affections of particular portions of this medullary substance, generally occupying some central situation, are, in a way that is totally inexplicable, connected with affections of the sentient and intelligent principle; a principle which we cannot any otherwise conceive than as being distinct from matter; although we know that it is capable of being affected by matter operating through the medium of this nervous substance, and that it is capable of reacting upon matter through the same medium. Of the truth of these propositions there exist abundant proofs; but as the evidence which establishes them will more conveniently come under our notice at a subsequent period of our inquiry, I shall postpone their consideration; and proceeding upon the assumption that this connexion exists, shall next inquire into the nature of the intervening steps in the process, of which sensation and perception are the results.

Designating, then, by the name of *brain* this primary and essential organ of sensation, or the organ of which the physical affections are immediately attended by that change in the percipient being which we term *sensation*; let us first inquire what scheme has been devised for enabling the brain to receive impressions from such external objects, as it is