exertion, is requisite for safety. Pain, whilst it is a necessary contrast to its opposite pleasure, is the great safeguard of the frame. Finally, as to man, we shall be led to infer that the pains and pleasures of mere bodily sense (with yet more benevolent intention) carry him onward, through the development and improvement of the mind, to higher aspirations.

To comprehend the perfection of the structure even of any single organ of an animal body, we must take it comparatively, that we may see how the same system is adapted to an infinite variety of conditions. This carries us necessarily into a new science, no less than that which regards the changes in the Earth's surface; and although in this comparison we find that there have been stupendous revolutions indicative of power; it is in contemplating the new forms and adaptations of living and organized matter to these successive changes in the surface of the earth, that we have the best proofs of the continuance of that Power which first created.

Such is the course of reasoning which I propose to follow in giving an account of the hand and arm, contrasting them, in the first place, with the corresponding parts of living creatures, through all the divisions of the chain of vertebrated animals; and then taking the hand, not merely as combining the perfections of me-