ble of receiving distinct luminous impressions from a class of vibrations which, applied to our visual organs, excite no sensation.* The functions of the antennæ, which, though of various forms, are organs universally met with in this class of animals, must be of great importance, though obscurely known; for insects when deprived of them appear to be quite lost and bewildered.

The *Torpedo*, the *Gymnotus*, and several other fishes, are furnished with an electrical apparatus, resembling the Voltaic battery, which they have the power of charging and discharging at pleasure. An immense profusion of nerves is distributed upon this organ; and we can hardly doubt that they communicate perceptions, with regard to electricity, very different from any that we can feel. In general, indeed, it may be remarked, that the more an organ of sense differs in its structure from those which we ourselves possess, the more uncertain must be our knowledge of its functions. We may, without any great stretch of fancy, conceive ourselves placed in the situation of the beasts of the forest, and comprehend what are the feelings and motives which animate the quadruped and the bird. But how can we transport ourselves, even in imagination, into the dark recesses of the ocean, which we know are tenanted by multitudinous tribes of fishes, zoophytes, and mollusca? How can we figure to ourselves the sensitive existence of the worm or the insect, organized in so different a manner from ourselves, and occupying so remote a region in the expanse of creation? How can we venture to speculate on the perceptions of the animalcule, whose world is a drop of fluid, and whose fleeting existence, chequered, perhaps, by various transformations, is destined to run its course in a few hours?

Confining our inquiries, then, to the more intelligible intellectual phenomena displayed by the higher animals, we readily trace a gradation which corresponds with the development of the central nervous organ, or brain. That the

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* Encyclopædia Metropolitana, Article "Light."