lucid and excellent notion of the Cambridge teacher was not accepted with greater alacrity, and further unfolded by his contemporaries." It has, however, since been universally adopted.

But though the discrimination of muscular irritability as a peculiar power might be a useful step in physiological research, the explanations hitherto offered, of the way in which the nerves operate on this irritability, and discharge their other offices, present only a series of hypotheses. Glisson[15] assumed the existence of certain vital spirits, which, according to him, are a mild, sweet fluid, resembling the spirituous part of white of egg, and residing in the nerves.—This hypothesis, of a very subtle humor or spirit existing in the nerves, was indeed very early taken up.[16] This nervous spirit had been compared to air by Erasistratus, Asclepiades, Galen, and others. The chemical tendencies of the seventeenth century led to its being described as acid, sulphureous or nitrous. At the end of that century, the hypothesis of an *ether* attracted much notice as a means of accounting for many phenomena; and this ether was identified with the nervous fluid. Newton himself inclines to this view, in the remarkable Queries which are annexed to his *Opticks*. After ascribing many physical effects to his ether, he adds (Query 23), "Is not vision performed chiefly by the vibrations of this medium, excited in the bottom of the eye by the rays of light, and propagated through the solid, pellucid, and uniform capillamenta of the nerves into the place of sensation?" And (Query 24), "Is not animal motion performed by the vibrations of this medium, excited in the brain by the power of the will, and propagated from thence through the capillamenta of the nerves into the muscles for contracting and dilating them?" And an opinion approaching this has been adopted by some of the greatest of modern physiologists; as Haller, who says,[17] that, though it is more easy to find what this nervous spirit is not than what it is, he conceives that, while it must be far too fine to be perceived by the sense, it must yet be more gross than fire, magnetism, or electricity; so that it may be contained in vessels, and confined by boundaries. And Cuvier speaks to the same effect:[18] "There is a great probability that it is by an imponderable fluid that the nerve acts on the fibre, and that this nervous fluid is drawn from the blood, and secreted by the medullary matter."

Without presuming to dissent from such authorities on a point of

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[15] Spr. iv. 38.

[16] Haller, *Physiol.* iv. 365.

[17] *Physiol.* iv. 381, lib. x. sect. viii. § 15.

[18] *Règne Animal*, Introd. p. 30