Grant: Electrolysis and Nermous System,

this paper is to sift a portion of the wheat from the chaff, and define a few of the limitations, and possibilities of electricity. One poi, is certain; where damage to neurones or their nuclei have cut musele fibres off from the normal source of stimulating energy, electricity is of little account, as far as maintaining muscular contractility is concerned. The reaction of degeneration is characterized by loss of excitability in the nerves and of the excitability to rapidly interrupted currents in the muscles. The reaction degeneration is of great moment, and when present, a lesion in some part of the nervous tract is readily diagnosticated. In such coaditions, electrolysis is useless. In nerve degeneration, when the induced current fails to meet with any response, it is called the reaction of degeneration. Weakened muscle cannot be strengthened by too strong a current, and such action must be avoided. So also with weakened nerve tissue. The power of the current must be graduated in proportion to the strength of either muscle or nerve.

"There is a great probability that a nervous pulse may be a change propagated by electr ! agency, and even in its essential nature, an electrical phenomenon, a traveling and temporary dislocation of preexisting discrete particles, and not a traveling process producing new and differently gifted particles from the old." It is as solutions of electrolytes confined to minute cylinders that nerve fibres have a most important interest, and yet the characters of these solutions are beyond the reach of methods of ordinary chemical investigation. In the transmission of the electric current, it is well to be aware of the remarkable discovery of du Bois-Reymond, that the whole longitudinal surface of the individual nerve fibre is probably equally posi-