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By Dr. W. F. G. SWANN

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IT is a characteristic of the march of progressive in natural philosophy that from time to time we seem to see the end of all that man may hope to learn. There arises before our mental vision a barrier, a barrier in which the horizon of knowledge seems also its boundary. The things that have not already been done seem trivial, or at best so hopelessly complex and involved in relation to our previous fields of thought that nothing but discouragement and waste of time offer themselves as the probable lot of any one who seeks to unravel them.

The tremendous development in electrical science which has taken place in the last hundred and fifty years acts in two diametrically opposite ways in moulding our appreciation of the contributions to science of such a man as Michael Faraday. On the one hand they emphasize to us the fundamentality of his work. They emphasize the fact that it is to investigations made for merely altruistic reasons that the world must look, ultimately, for returns in the form of material progress in the applications of science to everyday life. If we could picture that kindly philosopher who worked in his laboratory a century ago as having a prophetic vision of the results of his labor, we might suppose him well encouraged by the vision of the future in the many discouragements of his present. Wide as was his vision, however, we can hardly imagine that even Faraday could foresee the glorious maturity to which his efforts have grown to-day. To him those strange phenomena concerned with the behavior of light, those effects produced by the mutual motions of magnets and wires, those curious powers possessed by certain fish to give

[1] An address given on February 14, 1931, at the Massachusetts Institute of Technology, under the auspices of the Department of English and History.