

grants was, I think, at Cheltenham, where I directed the attention of the meeting to the vast commercial and industrial use which had been made of Faraday's discoveries of the relations of magnetism to electricity. The discoveries seemed to belong to the purest realms of science, and nobody could have foreseen their practical application. And it was not Faraday himself who made the application. He would never touch that side of the question, as he believed that to do so would damage his powers of research. Tyndall speaks particularly of this,<sup>5</sup> and I am sure that some discoveries which have appeared to have no practical bearing have resulted in greater advantage to the practice of medicine than some of those researches which have been undertaken from the purely utilitarian point of view.

At the present moment it is the fashion to say that things are better managed in Germany; as people said in my young days, "They do these things better in France." Although I do not at all admit this as a general proposition, I think it is to some extent true when it is applied to the relative value which English and German business men attribute to scientific research. I am informed that some great industrial concerns in Germany build and equip large laboratories in which 50 to 100 chemists are continually employed at varying salaries according to their position, and that they are directed by the most distinguished chemist the industry can procure. These chemists are not only permitted but are encouraged to prosecute research, and the researches are not limited to the possible utility to the industry, but may take any direction which seems good to the worker and the director. The object of the industry is to encourage chemical and physical research, with the full confidence that in a series of years the industry will derive enough benefit to pay the cost of the laboratory, and will probably derive more benefit than it would do by limiting the nature and scope of the researches to the possible service of the industry. Only the other day I was looking through the "Collected Papers of Lord Lister," and noticed that the earliest researches which he made were on muscular and elastic tissue. Suppose that he had been dissuaded from these researches on the ground that they seemed to have little or no practical bearing, he might have been so far discouraged as never to have undertaken original research. What