

were almost before their ink is dry ; and the answer might be that space is annihilated and time is far more profitable. They may ask the question in the darkness of night and see their portraits produced in a few moments, and the answer might teach them that darkness is not able to prevent the photographer, who used to wait for bright sunshine, from working by night as by day. And so we might go on finding answers almost sufficient to convince them that science is not without value even from their own point of view.

I do not know that we can find a more strikingly interesting illustration of the practical use made of purely scientific discoveries than by referring again to that "great high priest of nature" Faraday. Thirty years after he had witnessed the birth from his own brain of magneto-electricity as a feeble force able to deflect a delicate needle, he was vastly moved to find its developed power equal to the melting of a rod of iron. He lived to behold this one of his discoveries "grow into a mighty power ; he saw it everywhere employed and fortunes founded on its free use ; he saw it adopted for telegraphy and the luxury of private telegraphs made possible by its means ; he saw it used on a grand scale for electro-metallurgy ; he saw it generating ozone, and thereby refining sugar ; he saw its light used by the photographer to enlarge his negatives ; and, finally, he saw it shine like a midnight sun over the reefs around the coasts of England." There was no child of his body, but he had this most noble progeny of grand children and great grand children from this one of the infants of his brain to rejoice over as he saw it developing its marvellous capabilities of adaptation to the service of his fellow creatures.

In fact the answer which the majority of scientific men might give to the question I am speaking of might well be : The material advantages derived from our labours, so far as they benefit all, we share, but the greater part of them is for others only : they turn our thoughts into money and live more or less luxuriously while we are no better off than the juniors in some good mercantile establishment. People are glad enough to pick our brains for they make much money of them, though they do not think them worth more than a trifle to ourselves. To keep to the case of Faraday : when he was rising to the very height of his fame, all the committee of the Royal Institution, where he had achieved his great triumphs, could say was, "that certainly no reduction could be made in his salary of £100 per year, with rooms, coals, and candles." Many a foreman conducting a business within a short distance of the scene of Faraday's labours would have felt insulted by the suspicion that he earned less than four or five times as much as the philosopher. Since the British Government, like most governments, needs all credit due for any official encouragement of science, it must be added that Faraday actually received a pension of £300 a year, and, finally, at the hands of our truly noble Queen, a residence at Hampton Court. He was well aware how little our nation appreciates deep and pure philosophical pursuits, for he said : "For its own sake our Government should honour the men who do honour and service to their country. I have, as a scientific man, received from foreign countries and sovereigns honour which pass, in my opinion, anything which it is in the power of own to bestow." These foreign honours amounted to about 60 in number, in his own country he may have received perhaps half as many. Such honours are the main delight as they are the chief reward of the man of pure science, over and above, of course, the love he has for his work on the one