This commercial interest was unconsciously admitted by William Jack, Macmillan's physics adviser between 1876 and 1879, who felt it routine to "run" a small book or lecture series through *Nature* first, and then publish it in Macmillan's science series afterwards.

In Lockyer's relations with Macmillans rough moments were rare. In 1870, on the nomination of Joseph Henry, Lockyer received an offer to take up the directorship of the new 25 inch telescope being built in Virginia at the expense of John McCormick*, the American farm machinery magnate. Lockyer was continuing to support himself by freelance work in science journalism. Between 1869 and 1873, for example, he continued¹¹¹ to contribute to the Saturday Review. Lockyer's financial position, uncertain at best, would be transformed overnight and the attractions of a permanent post would be his. The offer was tempting.

At about the same time, Macmillan and Lockyer quarrelled violently—the only known record of any disagreement between them—apparently about Lockyer's status in the firm and a series of books he wished to promote. Sir Archibald Geikie acted as a go-between, and Macmillan eventually offered to make Lockyer the editor of a series (possibly the *Nature* series) and to give him a retaining fee of £250 per year as scientific adviser as well as his salary for *Nature*. Geikie hoped¹¹ this would save Lockyer from emigration and that Macmillan's plan "may be the nucleus of future comfort for you".

In December 1870, Macmillan wrote to Lockyer, away on the eclipse expedition to Sicily. Coupling his note with thoughts for a book on the sungod and his worshippers, Macmillan asked Lockyer to stay:

When the blossed event takes place, I shall have much pleasure in discussing with a view to increasing your pay for scientific advice higher [sic] and make, of course, the advice itself of more value to us. I am sure that it may be put on a satisfactory footing.

"But above all," Macmillan continued12,

I am very anxious about *Nature*. I can't help feeling that a little more of *something* would make it a success and if so, of course, it would be a permanent benefit to you. I have been thinking of many things. At present we are endeavouring to get it more widely taken at schools, and if we succeed in this will go into some other line.

Whether or not the vision of a financially secure position, carrying with it a powerful hand in editorial matters, settled Lockyer's mind in favour of staying, he decided not to emigrate.

In 1874, the Royal Society awarded Lockyer the Rumford Medal and made him Bakerian lecturer. His gratitude was tempered by the economic strain under which he lived. "I shall", he told Hooker13, "do all I can to remain true to science . . . but I feel . . . that the time is coming when I must say moriturus te salute and die the death by forsaking research and by ceasing to be true to science become more true to my wife and children." In 1874, while still at the War Office and working for the Devonshire Commission, Norman MacLeod and John Donnelly of the Science and Art Department arranged to get him 3 guineas an evening working at the South Kensington Museum. But even if Lockyer's health could tolerate it, the Treasury would not. As Ralph Lingen, Permanent Secretary to the Treasury, minuted14, "Mr Lockyer is Clerk in the War Office, and Secretary to the Science Commission. . . . How many other offices is he ready to fill?" There seemed no easy answer.

In 1875, after an exceptional recommendation by the Devonshire Commission and a personal application to the Prime Minister (and following a large and influential deputation from the British Association urging government action on the Devonshire Report), Lockyer was lent by the War Office to the Science and Art Department. One of the recommendations of the Devonshire Commission had been the creation of a national physical observatory. Lockyer's intervention was to be the first instalment in the long series of events which led to the establishment of the N.P.L. Ostensibly his duties were to help with the loan Exhibition of Scientific Apparatus and the collections of apparatus in the Science Museum; in fact he was given virtually a sinecure with which to carry on his research. Between 1875 and 1881, he drew at the rate of his old War Office salary, plus fees amounting to £700

Both Nature and Lockyer made heavy financial demands on Macmillan. Lockyer's own astronomy texts were a case in point. In 1877, when his sixth book, Star-Gazing: Past and Present, was in the press, he received a sharp scolding from William Jack who did not share Alexander's generous sympathies¹⁵:

Do for goodness sake keep the expenses of Stargazing down. We were rather startled by your saying if it hadn't been your own book you might not have been inclined to advise us to publish it and that you were afraid it might not find a large public. . . . Of course we can't publish generally without a prospect of paying, and we should soon cease to publish if we did. . . . We are all the more anxious because we have been looking at the Application of Physics Account-[presumably Lockyer's The Spectroscope and its Applications]. . . . We have a debt of £1,400 against the book and since midsummer we have sold four and had seven returned from agents. We know, of course, that you took a lot of trouble about the book, but a loss like this on one book is enough to make one's hair stand on end. . . .

"I suspect the public has a bad taste", added Jack, "and the *Applications* may be too severe for them"¹⁶.

In September 1872, George Craik¹⁷, Alexander's "Chancellor of the Exchequer" since 1865, told Lockyer¹⁸ that ". . . when you return we must have a little talk about your work". The outcome of this "little talk" is unknown, but if it was a scolding, Lockyer's connexions with South

Reprinted from Nature, October 27, 1870

NOTES

DESIROUS of aiding the English Eclipse Expedition, Prof. Peirce has addressed the following letter to Mr. Lockyer. It is to be hoped that observers will take advantage of the opportunity so magnificently afforded them:—

"MY DEAR SIR,—I have been directed by the Government of the United States to have the best possible observations made of the total eclipse of next December. If I could aid the cause of Astronomy by assisting the observers of England in their investigation of this phenomenon I should be greatly pleased. I take the liberty therefore to invite your attendance, and also that of other eminent physicists of England, with either of the parties of my expedition, one of which will go to Spain and the other to Sicily.—Yours very respectfully and faithfully,

"BENJAMIN PEIRCE

"Fenton's Hotel