

## Into the Twentieth Century

On November 6, 1919, *Nature's* Jubilee, Lockyer relinquished his editorship to Richard Gregory. By now, *Nature* had become a "great international institution".

IN 1902, Lockyer retired from the Royal College of Science. His fame had placed him above the fear of poverty and his release from constant haggling with the Treasury left him free for cultivating his interests in ancient monuments, the astronomical history of Stonehenge and Egyptian temples. In 1903, at the age of 67, he married again and became widely respected as an elder statesman of science. His retirement from official service also presaged a new career of public activity for *Nature*.

In January 1901, he wrote two leading articles, on the "New Century" and the "Advancement of Natural Knowledge", in which he set out the plan which governed the next fourteen years of his life. British industrial supremacy seemed at an end, and foreign domination was evident everywhere as a direct consequence of the progress of science abroad and the absence of a "scientific spirit" at home. Britain's government had to be made scientifically awake. The government's preoccupation with naval force had diverted attention from industrial competition. While Britain was committed to increasing her fleets<sup>1</sup>, "it seemed the duty of no government department to look after the scientific advances which are the only bases of the commerce which is to provide for the constantly increasing expenditure". It appeared<sup>2</sup>, moreover, that British intellectual resources were not being used to help retain her "old position by force of brains".

From 1890 on, Lockyer had drawn attention<sup>3</sup> to national education at all levels, "based upon a study of things and causes and effects as well as of words". In securing this, Lockyer, not a university graduate himself, looked to the universities for the remedy. Beginning in January 1903, *Nature* began a series of five leading articles on "The University in the Modern State". In the first, eleven British universities were compared with 134 in the United States and 22 in Germany. State grants to one German university were more than the total grant given to all universities and university colleges in the United Kingdom. In March Lockyer dealt with the Prussian universities. Palmerston is said by Matthew Arnold to have defined the Germany of his day as a country of "damned professors". To *Nature* it seemed the "damned professors" had done their job well. In May Lockyer looked to America, and in July Conway of Wales spoke of the academic plight of higher education. In August Lockyer tried to summarize, and applauded the recent efforts of Sir Gilbert Parker to establish cooperative relationships between the universities of the Empire. At the British Association meeting in Cambridge, Lockyer received a DSc—his first university degree.

As Ferdinand Lot, the French educationalist, remarked<sup>4</sup>, Germany had reached "a supremacy in science comparable to the supremacy of England at sea". In 1903 Lockyer returned to the twin theme of fleets and brains in his presidential address to the British Association at Southport, "The Influence of Brain Power upon History". Modelled, in part, on Captain A. J. Mahan's "The Influence of Sea Power upon History", the address was a reply to those who saw national resources only in terms of military armaments. His message was simple. British statesmen had neglected to organize and use the nation's intellectual resources and British industry had turned its back on scientific innovation. The country had spent £120 million to strengthen the navy but less than £1 million on its universities. Only £30 million (or 2 per cent of the national income) was being spent on all kinds of education. "We are suffering", he said<sup>5</sup>, "because trade no longer follows the flag, as in the old days, but because trade follows the brains, and manufacturers are apt to be too careless in securing them".

The remedy was equally simple<sup>6</sup>. "... Largely increased endowments of higher education and research and the utilization of scientific methods in all branches of administration equal to those at the disposal of competing nations, can alone save us". Lockyer's address had a wide

---

Reprinted from *Nature*, November 13, 1879

### GEOGRAPHICAL NOTES

THE Germans have so deservedly earned a distinguished reputation as scientific geographers, that it is quite pleasing to catch one very seriously tripping in geographical matters. In Philip Leopold Martius's "Das Leben der Hauskatze und ihrer Verwandten" (Weimar: B. F. Voigt, 1877), in the part of the work treating of the varieties of the domestic cat, appears (s. 61) the following extraordinary statement: "Die schwanzlose Katze von der Insel Man im stillen Ocean wenn nicht das Kap Man auf Borneo darunter zu verstehen, ist wohl noch nie zu uns nach Deutschland gekommen, obgleich sie auf der Katzenausstellung in London einst vertreten war." The author goes on to express his earnest wish that a pair of these great rarities, Manx cats, may be procured and exhibited at some zoological garden. Manxmen will hardly thank him for placing their native isle in the Pacific Ocean and confounding them with Polynesians, but the suggestion as the result of ponderous research that after all perhaps such a place as the Isle of Man does not exist, but that its mythical development has arisen from a mistake as to a cape of the same name in Borneo is too delicious altogether, and so ingenious and thoroughly German that it must needs be recorded for the benefit of the readers of *NATURE*.