

# BOOK REVIEWS

## A Boswell's Rutherford

*Rutherford: Recollections of the Cambridge Days.* By Mark Oliphant. Pp. xii+158+36 photographs. (Elsevier: Amsterdam, London and New York, 1972.) Dfl.22.50; \$7.

THE Centenary of Rutherford's birth was celebrated in New Zealand, Canada, Russia and Britain last year. The Addresses delivered to the Royal Society have not yet appeared in print; they concern mostly impressions of the Cambridge period and here is another contribution by Sir Mark Oliphant, a delightful volume of reminiscences by one who was accepted by the Rutherfords almost as an adopted son. For this reason it is more personal than are most biographies and as such is an important addition to the sum total of our knowledge of one of the world's greatest physicists. Sir Henry Tizard, the Secretary of the DSIR during Rutherford's Cambridge days, remarked that it was a pity that Rutherford had no Boswell, that no one had made notes of his ways, his sayings, his faults and his virtues: Oliphant's privileged position gave him a unique opportunity to observe Rutherford's idiosyncracies and we are grateful to Oliphant for publishing very many recollections and anecdotes of the kind Boswell would have recorded.

The official biography of Rutherford was written by Professor Eve, that for the Royal Society by Professor Eve and Sir James Chadwick, Sir Ernest Marsden wrote for the Royal Society of New Zealand, and Sir Henry Tizard wrote for the DNB. The Manchester period of Rutherford's life was well recorded at the 1961 Conference to mark the Jubilee of the discovery of the atomic nucleus; some of his students of that period told many interesting stories of Rutherford but as Professor H. R. Robinson then said we cannot

"parcel out  
His intellect by geometric rules,  
Split like a province into round and  
square."

The Centenary celebrations were enlivened by stories told by students of the Cavendish Laboratory and the present volume greatly enhances those recol-

lections and contributes very much new material.

Oliphant arrived in England in 1925 and on entering the Cavendish "I was received genially by a large, rather florid man, who reminded me forcibly of the keeper of the general store and post office in a little village behind Adelaide where I had spent my childhood. Rutherford made me feel welcome and at ease at once." This was surely one of his most endearing characteristics; whenever he went round the Laboratory he greeted each research student with a friendly question about progress of work phrased in such a way as to banish fear or embarrassment and thus evoked a detailed discussion in the freest terms. Just occasionally he would express displeasure, but his strictures were generally deserved: when they were not, his greatness of character was shown by his generous apology, like the one he made to Oliphant after his rage over Oliphant's acceptance of the Chair in Birmingham in 1936; "Go and be damned to you." Many examples are given of this kindly approach; in the garden of Newnham Cottage, in a ship's engine room talking with stokers and greasers, when chairing a meeting and when trying to console Kapitza who had been forcibly detained in Russia in 1934.

The age of "sealing-wax and string" had almost gone but the Laboratory was run on a very modest budget, only £16,000 from the university in 1935 including "£30 on an international conference". Rutherford had had to be very careful with money as a young man—he had had to borrow the money for his fare from New Zealand to England in 1895—and even when the Laboratory was famous he preferred to run it on a shoe-string. The Master of Caius College had persuaded some wealthy friends to offer Rutherford a private grant for research but there is no evidence that he used it and when Oliphant once said to him "it is a pity nobody has given you a gram of radium" (as had been given to Madame Curie), he replied "I am very glad nobody did; how on earth could I justify the use of a whole gram of radium." As Sir James Chadwick wrote in *Nature* shortly after Rutherford's death, "he knew his worth

but he was and remained, amidst his many honours, innately modest."

There is a full account of "The Crocodile". Kapitza's new Mond Laboratory was to have a plaque carved by Eric Gill in the entrance hall and a decorative theme carved just outside the door: this theme was of Kapitza's choosing—a crocodile. Kapitza apparently was always afraid of having his head snapped off, as by a crocodile, but an alternative explanation was that, like the crocodile in Peter Pan, Rutherford could be heard approaching long before he was visible. As recently as last September Kapitza would not tell the reviewer of this book why he had chosen this theme and the book does not answer the question. But the plaque portrayed Rutherford with a Jewish nose and it elicited much adverse criticism: the correspondence on the matter is here quoted extensively. But the person who minded least was Rutherford himself; he merely remarked that his name should be "Rutherford".

The chapter which old Cavendish men will turn to first is the very personal story about "Home, Holidays, Politics": the tragedy of his daughter's death in 1930 just as he had heard privately of his forthcoming elevation to the Peerage, the sadness at the death of his mother at the age of 92, the joys of the country cottages in Wales and later in Wiltshire, Lady Rutherford's gardening and "Ern's" politics; to Oliphant he said "that (military tattoo) expressed the true spirit of England far better than all the nonsense you read in *The New Statesman*." He did not seem to have any absorbing hobby except reading, and in particular, reading history.

Sir Mark concludes "In all ways except in his science, Rutherford was an exceptionally ordinary man in both appearance and character. Quite naturally, he was friendly with all men and quarrelled with none. His success came as much from complete dedication to his work as from his innate ability, so that even the average student was inspired to emulate him. Yet there was something in him which raised him high above others and put him in the company of the greatest of men."

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