# DR JOHN VON NEUMANN

## An appreciation

Professor M H. A. Newman writes:

It is natural that your notice of John von Neumann should deal almost exclusively with his work on the development of atomic weapons, for which he was recently decorated by President Eisenhower. But it is as a great mathematician and mathematical physicist that he will be permanently remembered In pure mathematics, his finest work was done in the most abstract parts of the subject, in problems of logical foundations, in topological group-theory, and in his continuous geometries. Yet when he turned to physical and engineering problems, he did not remain suspended in general theories, but made a thoroughly practical and quantitative approach. For example, in his famous report on automatic computing machines, one of the pioneering works on the subject he not only laid down general principles of design but pointed out that new apparatus for storing numbers must be looked for if prohibitive amounts of electric current were not to be used.

His most original and famous discovery was the Theory of Games, particularly of games where the players have incomplete knowledge of each other's cards or pieces This theory, first sketched out in his early twenties; was later elaborated and applied by him and others first to economics, and then more successfully to statistical decision problems, such as those that arise in industry, with inscrutable Nature as one of the "players"

He was something of a youthful prodigy (his logical system was discovered when he was 21) and throughout his life he combined with a sharp wit a diffident air, with which he listened politely and attentively to the questions of persons of every age and status His devotion to tasks which he considered of supreme importance removed him for ten years from the world of mathematics, to which many had nevertheless hoped that he might finally return