## BLACKFRIARS

NEWMAN HISTORY AND PHILOSOPHY OF SCIENCE SERIES, published by Sheed and Ward.

G. Buchdahl: The Image of Newton and Locke in the Age of Reason; 5s. R. Harré: Theories and Things, A Brief Study in Prescriptive Metaphysics; 5s. E. F. Caldin: The Structure of Chemistry in relation to the Philosophy of Science; 3s. 6d. L. K. Clark, O.P.: Pioneers of Prehistory in England; 5s. This is an admirable series of monographs and these recently published members are well up to the standard of their predecessors. Dr Harré in Theories and Things argues on purely scientific grounds against positivistic doctrines of scientific theory and in support of a metaphysical view which he significantly describes as 'the doctrine of ontological depth'. He illustrates his thesis by refreshingly original examples from the theory of droplets, from the action of antibiotics upon viruses and from the neutrino, as well as from the more hackneyed realm of quantum theory and the complementarity principle. An essential point in his argument lies in the recognition of continuity ('family continuity') between the objects of crude sensation and those revealed by scientific instruments, from the okapi to the bacterium and from the bacterium to the virus. Dr Hesse (Science and the Human Imagination, p. 151) is one of the few other writers who have made this point and she carries it further than Dr Harré does; it is virtually ignored by positivists like Professor Gilbert Ryle. But I find myself wondering whether Dr Harré's exposition does not need to be supplemented by an epistemological doctrine of the type held by such modern Thomists as M. Maritain and M. Gilson with its distinction between the sensible objectum quo and the intelligible objectum quod; I have tried to show the scientific implications of this doctrine in the second chapter of my Christian Theology and Natural Science.

Dr Buchdahl, as the title of his monograph suggests, is concerned not so much with what Newton and Locke themselves believed as with the image which the eighteenth century made for itself out of them. He skilfully distinguishes between the rationalist and the empirical elements in the successive forms of the image down to the revolt of the nineteenth-century romantics. Not the least valuable feature of his book is provided by the large number of illustrative texts which he has appended to his own discussion.

Fr L. K. Clark gives a straightforward account of the earlier phases of prehistorical study in England, with special attention to the attractive figure of the Roman Catholic priest John MacEnery of Torquay, who died in 1841.

Dr Caldin in his brief and lucid discussion of the structure of chemistry shows that this particular science has aspects of philosophical interest which other sciences emphasize less clearly.

Altogether, this is an extremely welcome and stimulating batch of little books.

E. L. MASCALL