of several of the questions that have been suggested for class discussion, while others describe in full detail what is to be done. Nomenclature also varies. Stock nomenclature is used throughout the "Basic Course", but is not always adopted in the "Laboratory Investigations".

Among minor errors that might have been eliminated by careful editing are the use of ML on the graph illustrating Experiment 17·1 (instead of cm^3 which is used in the text), the claim on page 322 that the same experiment is an example of "double decomposition", the mislabelling of Experiment 15·1 *c* in the "Laboratory Investigations". and the irritatingly random alternation in the Basic Course between black and brown ink. Though it is adequately cross-referenced, the Basic Course would benefit from an index, and some of the information required in planning the course (for example, time schedules) would be more readily accessible if it were assembled in tabular form.

Since there is no textbook for the pupil, setting homework is likely to raise problems that do not arise in the traditional course. The Nuffield scheme attempts to solve this problem by suggesting homework assignments in the Basic Course, some of which are too vague to be helpful, and by offering the Background Books. It is hard to comment on these at a time when so few have been published, but those which have appeared seem attractive in design and well suited to the age and interests of their readers. A possible criticism is that they tend to make the whole course too insular and self-contained. Suggestions for further reading beyond the range of the Nuffield publications would have been welcome, even at the risk that pupils might acquire extraneous foreknowledge of discoveries that they are intended to make for themselves.

Trouble is anticipated, too, from the regular testing of progress and achievement which supplies such a useful incentive in a conventional course. To devise "Nuffield" type questions requires much thought and effort and a technique that is unfamiliar to many chemistry teachers. The difficulties are not insuperable however and the attempt to surmount them, in itself a salutary exercise for the teacher, would amply repay the effort involved.

Taken as a whole, the Nuffield scheme will undoubtedly stimulate reform of chemistry teaching and will give great practical help to teachers in planning courses and in conducting experimental work. The larger claim tacitly assumed by the authors in the "Introduction and Guide", that the investigational method must inevitably promote scientific habits of thought, is so fundamental that it deserves careful verification. There is an instinctive feeling that it must be so, but instinct is not always a reliable guide. It would be interesting to know more of the educational experiments that were used to evaluate results achieved by the Nuffield approach. Were the scores on Nuffield type examinations of students taught by these methods compared with those of control groups taught by conventional methods ? It is to be hoped that details of such experiments will be published in due course, and that they will show all the scientific rigour that the Nuffield scheme is intended to promote in students of chemistry.

E. J. HARTWELL

WILLIAM HARVEY : A NEW BIOGRAPHY

The Life of William Harvey

By Geoffrey Keynes. Pp. xviii + 483 + 32 plates. (Oxford: Clarendon Press; London: Oxford University Press, 1966.) 90*s*. net.

THERE have been a number of short lives and memoirs of William Harvey, beginning with John Aubrey's account in his *Brief Lives*, which Sir Geoffrey Keynes vindicated in the Harveian Oration of 1958. Sir D'Arcy Power's admirable biography was published in 1897. Since then, there have been further biographies by Dr. Chauvois in French, also translated into English (1957); by Prof. K. J. Franklin (1961); and by Dr. K. D. Keele (1965), who points out that the stimulus of Aristotle "provided the setting of the bright jewel of Harvey's experimental genius".

Sir D'Arcy Power said in the preface to his book that it was not possible to add much that was new about Harvey. Since 1897, however, many new aspects of Harvey's life have been recorded by H. P. Bayon, C. Singer, A. Robb Smith and others. Lord Brain in his Harveian Oration (1959) and Drs. Richard Hunter and Ida Macalpine in their accounts of Harvey's knowledge of neurology and psychiatry reveal another side of his inquiring mind; in 1964 Dr. Gweneth Whitteridge gave us an authoritative transcription and English translation of Harvey's anatomical lecture notes; she has also edited and translated *De Motu Locali Animalium*, being his notes for an intended treatise on the movement of animals which he never completed.

This enhanced knowledge of Harvey, with several further original additions, is now assembled in Sir Geoffrey Keynes's biography, which will rank as the most complete and authoritative life of Harvey for many years to come. It incorporates all the many activities of Harvey's life. His Cambridge career, his studies and graduation as M.D. of Padua; his work for the College of Physicians and as physician to St. Bartholomew's Hospital; his services as royal physician to King James I and King Charles I; his patient researches on the circulation of the blood; his wardenship of Merton College and work at Oxford during the civil war, including advice to the King on the care of the sick and wounded; his investigations recorded in *De Generatione*, which, as the author states, is an extremely interesting and important book; and other features which increase our admiration for Harvey as a pioneer in physiology and scientific medicine and a generous benefactor to mankind.

Sir Geoffrey finds no evidence that Harvey had the M.D.Cantab, as is usually stated, although the University of Oxford in conferring the M.D. believed he had so incorporated on his Paduan degree. Sir Geoffrey also shows that Harvey was an archaeologist and participated in an investigation at Stonehenge; he notes that Harvey last saw King Charles at Newcastle in 1646; and he is doubtful about the visit, recorded by Aubrey, of Harvey to Italy with Sir George Ent after the King's death.

In addition to the great discovery of the circulation of the blood and his wide outlook on many branches of medicine, Harvey was a public health administrator and adviser to the State; a pioneer in embryology; a forerunner of Wallace and Darwin; the founder of scientific midwifery; a dietician and teacher of wise nutrition; an advocate of smoke abatement before John Evelyn; an epidemiologist who first showed that contagious and infectious disease spread through the blood, and whose experimental investigations extended even to the threshold of bacteriology. All this and much more is to be found in this impressive and scholarly biography, well printed and produced by the Clarendon Press, Oxford.

ARTHUR MACNALTY

"APES" REVEALED

Men and Apes

By Ramona and Desmond Morris. Pp. 271. (London: Hutchinson and Co. (Publishers), Ltd., 1966.) 50*s*. net.

THIS book is the second in a series intended to explore the interrelationship of men and animals. In contrast to the first volume (*Men and Snakes*) the animals chosen are zoologically those closest to man, and interest is thus