

## HARVEY ON MOVEMENT IN ANIMALS

### De Motu Locali Animalium, 1627

By William Harvey. Edited, translated and introduced by Dr. Gweneth Whitteridge. Pp. xii+163. (Cambridge: At the University Press, 1959. Published for the Royal College of Physicians.) 60s. net.

SIR RUSSELL BRAIN was president of the Royal College of Physicians when plans were being evolved to mark the Tercentenary of Harvey's death. *Inter alia*, proposals were made to the College Library Committee at one or more of its meetings that Dr. Gweneth Whitteridge, who is archivist to Harvey's Hospital of St. Bartholomew in the City of London, should first transcribe and later translate and duly introduce his "De motu locali animalium", which forms ff. 69-118 of the British Museum manuscript Sloane 486. This was written throughout in Harvey's own hand, and consists of his notes on the anatomy of muscles (ff. 1-68), followed by his "local movement in animals". A title, "Guilielmus Harveius de musculis, motu locali etc.", written on f. 1 of the double manuscript, may have been added by Sir Hans Sloane. Anyhow, Harvey's rough draft for his intended book on the local movement of animals was begun in 1627, was mentioned in *Cap. xvii* of his "Exercitatio anatomica de motu cordis et sanguinis in animalibus", 1628, and was added to on several occasions, but was never cast into final literary form. The notes, which came to light in the British Museum in the middle of the nineteenth century, have never before been transcribed, but they make clear the tenor of Harvey's projected work on muscle and, though containing no new experimental observations, show that his understanding of muscle and muscular contraction was sounder than that of his predecessors and even of some of his successors.

The work has been published for the Royal College of Physicians at the Cambridge University Press, and has as an illustration a photograph of f. 95 of the manuscript under ultra-violet light, as evidence that such treatment has not revealed the presence of any writing which was not previously visible. The edition is limited to 1,000 copies.

Its chief concern has been to provide a text which is readable. The English version of "De motu locali animalium" is not to be taken as a literal translation of the Latin text, for it was decided against following Harvey's Latin literally and reproducing his notes in note form in English. The alternative method adopted was to follow the arguments alluded to by Harvey and to expand his notes into complete sentences by reading the books which he was following, and as closely as possible completing the thoughts which he, for his own reference, needed only to note down in a few words. Inevitably, this method has led to a certain amount of interpretation which may or may not be correct. The English version is therefore offered merely as a suggested rendering.

Dr. Whitteridge thanks the Librarian and staff of the Library of the University of Edinburgh, which has on its shelves several of the actual editions of the works used by Harvey. She also thanks her husband, Prof. David Whitteridge, for his discussion of physiological problems and for his help in writing about the importance of Harvey's 1627 treatise in the history of muscle physiology. She further expresses gratitude to Dr. Lorenzo Minio-Paluello for his

encouragement to one who, before this, knew nothing of the natural philosophy of Aristotle.

There can be no doubt that Dr. Whitteridge has done consummately well in transcribing Harvey's obscure handwriting, translating his Latin, and annotating his notes; as Sir Russell Brain says, she has earned the gratitude and admiration of students of Harvey all over the world, not least among them being the President and Fellows of the Royal College of Physicians of London, at whose request she undertook the work.

Though Harvey's notes, as already stated, contain no great discovery, they have "much of interest to the student of his mind. They show him, as always, gathering his illustrations from every kind of animal and even plant life, and in addition recalling clinical observations which must have impressed him".

K. J. FRANKLIN

## RECONSTRUCTING THE PAST

### Life and Death in the Bronze Age

An Archaeologist's Field-Work. By Sir Cyril Fox. Pp. xxvii+193+49 plates. (London: Routledge and Kegan Paul, Ltd., 1959.) 45s. net.

THIRTY years ago prehistorians were content to collect the relics left by early man, and to accept the view that little, if any, knowledge of the life he lived could be obtained—they were satisfied to produce the skeleton, but fearful of attempting to clothe it with flesh and blood. It is true that occasionally—as, for example, when discussing palaeolithic ceremonial burials or when the cave art was under consideration—it did seem permissible to talk about ritual and magic, but by and large it was felt to be dangerous to attempt to picture prehistoric man as a living individual, even with the help of such a kindred study as ethnology. How could one be certain that similar conditions in times very different must have produced a similar outlook on life?

For some time past, however, a new approach to the study of prehistoric man has been developing, leading to just that ground where the earlier investigators feared to tread. This new approach can be dangerous and result in grave errors, but not when it is pursued by such a master of the subject as is Sir Cyril Fox. There is no doubt that if a brilliant investigator has lived with his work for much of a lifetime he develops a sixth sense which enables small circumstances to be noticed which fall severally into place until the intuition becomes a well-nigh demonstrable fact. This is what makes any work by Fox so fascinating. Any good excavator can dig up prehistoric relics in a highly satisfactory manner using all the modern techniques; but it takes a Fox so to live with the builders of, say, a megalith he is investigating as to see them at their work of building and performing the ritual for which the monument was raised—and then to convey all this to his readers. Fox has another advantage over many of his contemporaries in that he remains so young. Often the later, post-retirement, works of a savant make sad reading, but this is not at all the case with the book under review. There is a freshness about it all, even when mere descriptions of excavations are being given, which is stimulating and delightful.

The period under consideration covers the millennium 1700 B.C.—700 B.C., and the excavations in question were mostly situated in Wales and were mainly