is part of that broader field of experimental pathology to which all medical sciences belong". This is reflected in the thirty important years Hardy spent as Chairman and Professor in the Department of Surgery at the University of Mississipi in Jackson, where he divided his activities among surgical practice, teaching, and research.

The period of his memoirs saw advances in surgical pathology and anaesthesia. Also arterial surgery, open-heart surgery, organ transplantation, and the artificial heart and other prostheses were developed. Following extensive research, including a study of the moral problems, his team undertook and recorded the first human lung and heart transplants, in 1963 and 1964 respectively.

Hardy was not only an active surgeon, but as an author contributed much to surgical literature. His wide reading, too, he regarded as a form of education. His most gratifying honour was his election as President of the American College of Surgeons in 1980.

It is ironic that James Hardy, vascular surgeon, should undergo in 1982 and 1985 carotid endarterectomy. His well-earned retirement allowed him professional rest to enjoy his "closely knit" family life.

> Valentine Swain Chigwell, Essex

VIVIEN T. THOMAS, Pioneering research in surgical shock and cardiovascular surgery. Vivien Thomas and his work with Alfred Blalock, Philadelphia, University of Pennsylvania Press, 1985, 8vo, pp. xx, 245, illus., £29.95.

This is a remarkable autobiography by a remarkable man. Owing to "collapse of the Stock Market", this American Negro was unable to proceed to a medical career. Luckily, he became Alfred Blalock's technician first at Vanderbilt University and later at Johns Hopkins University, both in the Experimental Surgery Laboratories. With his aptitude to learn and his manual dexterity, during the next twenty-eight years, Vivien Thomas became a first-class trained surgical assistant. He was at the ringside at most of the pioneer procedures. Blalock's work on surgical shock deserves great credit. The development of cardiovascular surgery was largely due to the backroom expertise. This culminated in the successful correction of Fallot's Tetralogy in 1944, following eight years of intense research. Consideration of this anomaly was instigated by Helen Taussig and perfected by Blalock and Cooley on a child. It is now a routine procedure for "blue babies".

The old Hunterian Laboratory in Baltimore was the cradle of many surgeons who became well known in after years, such as Henry Bahnson, Denton Cooley, Rollins Halon, Mark Ravitch, and David C. Sabiston jun. Each contributed notable works in pioneering cardiovascular procedures, most of which were recorded in surgical journals. Sixty-four such papers are listed in the references.

Vivien Thomas was not only a skilled operator, but also helped in clinical assessment, invented a few surgical instruments, and taught routine animal surgery in the laboratory. With Blalock, he had a good loyal understanding. Towards the end of his chief's career, the research programme slackened. In 1971, Thomas was presented with a portrait of himself given by the Old Hands Club (former Halsted Residents). Five years later, the honorary degree of Doctor of Laws was conferred on him. Happily, the portraits of Blalock and Thomas hang beside each other in the lobby of the Alfred Blalock Clinical Science building—the master beside his right-hand man.

> Valentine Swain Chigwell, Essex

RUDOLF VIRCHOW, Medizin und Naturwissenschaft. Zwei Reden 1845, with introduction by Werner Scheler, Berlin DDR, Akademie Verlag, 1986, 8vo, pp. 80, M.30.00.

Handsomely bound in red cloth with gold lettering on the front and spine, this volume is one in the series Dokumente der Wissenschafts-geschichte, edited by Christa Kirsten and Kurt Zeisler in