

## Book Reviews

John B. Blake examines the work of Billings and stresses the scope of the indexing and abstracting sources available prior to the foundation of the *Index-Catalogue* and *Index Medicus*. He concludes with an illuminating analysis of the bibliography appended by Billings to his M.D. thesis on the treatment of epilepsy by trephination.

Genevieve Miller's account of 'The nineteenth-century medical press' is primarily concerned with the American scene. She emphasizes the dependence of American medical publishing on editions and translations of European works, and gives an interesting account of some peculiar features of book distribution in an expanding and largely rural society.

Edwin Wolf 2nd in his 'Medical books in colonial Philadelphia' reminds the reader that a general library, such as the Library Company of Philadelphia, may have important medical holdings, in this case largely due to the collecting activities of the Logan family. Philadelphia was a focal point of the eighteenth-century American medical world and it is surprising that the Library Company has not received more attention from medical historians. His bibliography is particularly valuable for the amount of material listed which was published in non-medical books and periodicals.

K. Garth Huston on *The physician as bibliographer and bibliophile* covers a wide range of interesting figures from Walter Charleton to Sir Geoffrey Keynes (not, strictly speaking, a physician), concentrating particularly on the latter and his many and varied achievements.

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THEODORE I. MALININ, *Surgery and life. The extraordinary career of Alexis Carrel*, London and New York, Harcourt Brace Jovanovich, 1979, 8vo, pp. xiii, 242, illus., £8.40.

There is still little known in depth of the scientific work and methodological approach of some of the master-builders of modern surgery such as T. Billroth and T. Kocher. However, more is known about Alexis Carrel (1873–1944). Their general views on medicine and surgery as parts of the culture of their times have been investigated even less. Despite this, Dr. Malinin's book deliberately centres on Carrel's scientific accomplishments. He presents these, Carrel's broad and reflective mind, and his more public activities, in a well-balanced manner. This allows a monolithic insight into the motivation for the results and evaluation of both clinical research and laboratory biology during the first four decades of our century.

Born in France, Carrel did the bulk of his work at the Rockefeller Institute for Medical Research in New York. He was a great innovator: of a successful method of suturing blood vessels, of antiseptic treatment of war wounds (with Charles Dakin), of organ transplantation, and of invaluable *in vitro* techniques such as tissue and organ culture (with Charles Lindbergh). Deeply impressed by a miraculous cure he witnessed at Lourdes, he also acknowledged in his best-selling book entitled *Man the unknown* (1935) the limits of highly specialized sciences and technology for the understanding of the human being. While Carrel admitted that some of his arguments on, for example, criminality, education, *élites*, and sexuality were not then

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supported by facts, he believed in the good of the inductive method in all walks of life. He put this to work in studies such as the influences of environment on parameters of behaviour of mice and men. He eventually succeeded in building up a *Fondation Française pour l'Etude des Problèmes Humains* in occupied Paris from 1941 to 1944, for which he was much maligned after the liberation.

Carrel's views on the ideal conditions for successful research, which arose from the very different situations he had found in France and in the U.S.A., and which Dr. Malinin judiciously extends to our times, make equally useful reading. Except in this chapter and in the section on Carrel's "immortal" strain of fibroblasts in tissue culture, where the conclusion is, however, at variance with that of J. A. Witkowski ('Dr. Carrel's immortal cells', *Med. Hist.*, 1980, **24**: 129–142), the author hardly pushes his analysis further than did the shorter biography in English by W. S. and P. D. Edwards (1974) (which is not mentioned in the "Selected References").

Thus it may perhaps be regretted that Carrel's relationship to the views on science expressed simultaneously by his countrymen, Charles Robert Richet (winner of a medical Nobel Prize in 1914) and Lecomte du Noüy (of the Pasteur Institute) are omitted or only cursorily mentioned in the present volume. Lecomte du Noüy in fact claimed in the Introduction to owe his writing of *Le temps et la vie* (1936) to Carrel's stimulus. Neither is the reader introduced to, for example, Carrel's posthumously published *Réflexions sur la conduite de la vie* (1950). Scholars will miss more the absence of footnotes than the lack of biographical references to a number of persons introduced in this book. The easily understandable descriptions of complex technical aspects involved in Carrel's experimentation will, however, be appreciated.

The book is nevertheless well worth reading by both active scientists and historians as a reminder of a man whose ideas were sometimes termed "visionary" and as a stimulant for future research into a captivating group of modern medical investigators.

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BRUNO LATOUR and STEVE WOOLGAR, *Laboratory life. The social construction of scientific facts*, Beverly Hills, Calif., and London, Sage Publications, 1979. 8vo, pp. 272, illus., £11.25 (£5.50 paperback).

About five years ago Bruno Latour, trained in France as a philosopher and semiotician, set out for deepest California to undertake an anthropological study of a tribe of scientists. Surviving both the perils of their exotic customs and the considerable temptations to go native, he has returned to relate (with Dr. Woolgar) his discoveries in (almost) standard sociological English.

Here are some of his findings: scientific laboratories and the devices they contain exist to produce "inscriptions". Sometimes the laboratory's inhabitants say that certain inscriptions and literary productions pertain to specific bits of natural "reality", for example, the neurohormone "TRH" (for these tribesmen call themselves, amusingly, "neuroendocrinologists"). The purpose of all their various and expensive inscription devices seems to be the production of what they call "facts".